

WHAT KIND OF CIO ARE YOU? Business Strategist ► Transformational Leader ► Function Head

CIO

BUSINESS TECHNOLOGY LEADERSHIP

Inside Our Exclusive Survey of 558 CIOs

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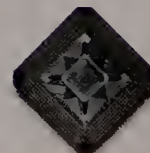
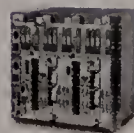
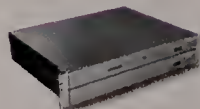
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CIO Online

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[EXCLUSIVE RESEARCH]

The More Things Change...

Wonder how this year's "State of the CIO" survey stacks up against those from years past? Wonder how you fit into the big picture career-wise, salary-wise and every otherwise? Delve deeper into the last four years of research, including 2007's breakdown of CIO types. And to see where you fit in, take our self-assessment quiz.

» www.cio.com/state-of-the-cio/2007/index

» quizzes.cio.com/impact_quiz/

[CIO CAREERS]

What Stuart Scott's New Job Means to You

Executive recruiters say Scott's rapid recovery from his Microsoft ouster (his new gig is COO at mortgage lender Taylor, Bean & Whitaker) means that you may be down, but you're never out—especially if you're willing to broaden your horizons.

www.cio.com/article/158551

[VENDOR RELATIONS]

Yes, Size Matters

The big IT consultancies don't seem to want to do business with small to midsize organizations. CIO Executive Council member Michael Gaskin thinks the IBMs of the world are leaving money on the table, not to mention risking future sales.

www.cio.com/article/162450



[ADVICE & OPINION]

DOES OFFSHORING SAVE YOU MONEY?

Stephanie Overby blogs about the latest research from European economists on the costs of offshoring. Could it be that outsourcing is actually costing you money? advice.cio.com/blogs/talent_show

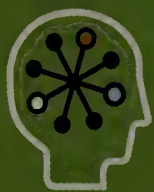
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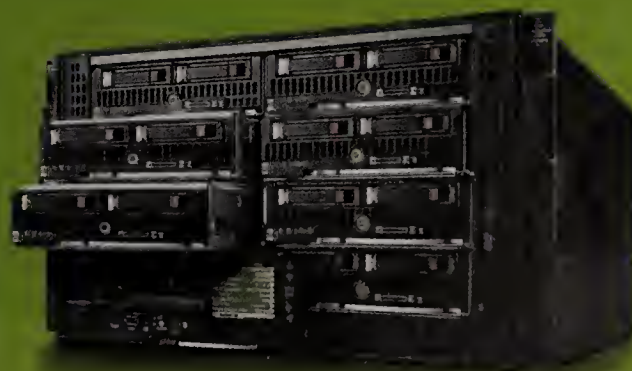


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FROM THE EDITOR

A Call to Action

The State of the CIO is...mixed



Not all CIO jobs are the same. The needs and IT maturity of companies vary widely. You wouldn't expect a mining operation and a financial services company to want or need the same kind of CIO. That said, each year there are fewer and fewer businesses that couldn't be improved with IT and by CIOs who know the score.

So last year we began reporting our annual State of the CIO results not just by industry and company size but by different types of CIO. This year, we aligned our types with the CIO Executive Council's Future State model, developed last year by a group of leading CIOs.

The model includes slices for these three segments of the CIO role: Function Head (operational excellence), Transformational Leader (driving change through business process transformation) and Business Strategist (focusing on IT-enabled business strategy to drive top-line results).

So where are we today? According to this year's "State of the CIO" survey—a comprehensive look at how 558 CIOs spend their time, what their priorities are, how much money they make, what kinds of budgets they control and more—37 percent of CIOs fall into the Function Head space, 51 percent are acting as Transformational Leaders and a minority (12 percent) fall primarily in the Business Strategist part of the model.

As organizations mature, as the profession evolves, we expect to see those percentages shift until, eventually, most CIOs will spend the majority of their time in the business strategy space, as the authors of the Future State model envisioned.

But there are other differences between CIOs, not necessarily based on company need or organizational maturity. As Senior Editor Kim Nash writes, "For some CIOs, there's no separation between IT and business, while for others, a gulf undercuts their ability to do, or even define, their jobs." This is bad for CIOs and for business, and we have some suggestions for what to do about it (see Page 40).

It's time to stop talking and start doing. "A strong, balanced, successful CIO doesn't heed pundits [or] pay attention to buzzwords," Nash writes. "Strong CIOs don't align technology and business. They work with their peers.... They figure out ways to make money for the business. They cut waste and plow those savings into projects that create value. Sometimes they create whole businesses where none before existed." The world needs more strong CIOs—the sooner, the better.

Abbie Lundberg, Editor in Chief
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PHOTO BY STEVEN VOTE



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Hello, 2008

What's in store for IT and the CIO?
Let's peer into the mists.



A wise man once told me, "When you try to read a crystal ball, you usually end up chewing glass." But the New Year is just around the corner so let's see if we can see what's in store for 2008....

10. Mobile explodes. With 3 billion devices already in the market and a growth rate that will double over the next two years, watch how the RPMs of commerce increase via these devices.

9. CIOs still try to figure out Enterprise 2.0. (Most IT executives I talk to are saying that right

now hype dominates substance.)

8. CIO turnover continues to accelerate. The job's not getting easier, you know. Increase revenue, keep the lights on, protect the customer—and do it all for less. Sounds as if 2008 will be a challenge.

7. Best-of-breed vendors find it hard to survive: EqualLogic, Vontu, Business Objects, Cognos, Hyperion, RSA, Neoware, Knightsbridge, WatchFire...need I say more?

6. Green goes gold and CIOs need to grasp the holistic cost of powering their data centers. IT leaders will no longer be able to say, "Electric bill? Not my problem."

5. Training current employees and finding new talent are a major concern on which CIOs need to focus. As new technology needs come into play, are you staffed for success?

4. Master data management starts to make some noise. As BI companies continue to get gobbled up, major players will now be able to deliver true MDM platforms. Users are asking for it and the vendor community is responding by building platforms that will allow for data analysis, integration and reconciliation.

3. Unified communications is aggressively accepted, and the likes of Cisco, Nortel, Avaya, Microsoft and others will battle it out in this booming market.

2. For all its talk, money and bluster, Google fails to win over the CIO or the enterprise. Another year goes by in which Google talks the talk but doesn't walk the walk.

1. Larry Ellison is wrong. There will be more than five software vendors left in 2008. There will be six. Maybe seven if we're lucky.

On behalf of everyone at CIO, I wish you a safe, happy and healthy New Year.

Michael Friedenberg, President and CEO
mfriedenberg@cio.com

PHOTO BY CHRISTOPHER HARTING



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READER FEEDBACK

InBox



IT Complexity

The feature “Cures for Complexity” [Dec. 1; www.cio.com/article/158356] is an interesting article that makes some excellent points. Complexity is a combination of the initial design and a gradual mutation that occurs over time.

Solving the complexity problem will require two prerequisites:

1. Organizations and individuals must recognize complexity and the impacts. Complexity tends to be hidden. Many smart people do not recognize complexity because the complex seems simple to them. Some people admire complexity and do not view it as a problem. The true consequences of complexity are not recognized until there is a critical issue that needs to be addressed and the complexity impedes the resolution. Shortcuts taken to resolve the issue ultimately increase the complexity. “Catch 22.”

2. A culture change is required. The entire organization (including the business areas) must recognize that complexity increases long-term risks and

costs even if it is cheaper in the short term. Management processes must require a complexity analysis and a discussion of simpler alternatives.

NICK SPANOS

The biggest problem with complexity is the failure to recognize it.

We attempt to solve problems of a complexity far beyond the ability of the human intellect.

We try to write programs and test out the error in, for example, an ordinary system with 32 bimodal variables. That’s 2 billion combinations. Clearly, formal statistical techniques are required.

We continue to write monolithic programs with all cases and monolithic databases with all data variations. For instance, instead of processing all employees’ payroll checks in a series of large program steps, one could use a pipe-and-filter design where each type of payroll is processed in its own thread using far simpler programs—one employee at a time.

Same for the failed IRS system. A relatively simple thread could have been developed to only process 1040EZ forms completely isolated from each of the other types of filers. Divide and conquer.

CARL WAYNE

LinkedIn Versus Facebook

I’m there with Gary Beach [“All About the Links,” Dec. 1; www.cio.com/article/158550]. As much as I consider it, Facebook doesn’t attract me.

LinkedIn—that’s another story.

As a purely professional networking site, I describe it to newcomers as

“We continue to write monolithic programs with all cases and monolithic databases with all data variations.”

—Carl Wayne

safe, free, and well worth the investment of time.

I’ll politely offer that my own connection policy is to know and trust the people I connect to—because later on, when I’d like to ask them to help me connect to people through them, they’ll know and trust me—and approve the request.

If you connect to people you don’t trust, it makes it awkward when that person then asks you to connect them to the people you do trust. The goal is not to get the biggest network, but to make your network effective.

Best of success with LinkedIn.

STEVEN TYLOCK

Author of *The LinkedIn Personal Trainer*
linkedinpersonaltrainer.com

As a solid advocate of social networking, I believe both LinkedIn and Facebook have uses that are valuable.

LinkedIn is basically a living résumé; it gives background when you are beginning discussions with someone that you don’t already know.

Facebook, on the other hand, gives you personal context. In a couple minutes, I can learn as much information about a person as they want to share.

Despite an increasingly technology reliant world, learning a potential business partner’s favorite sports



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team, vacation destination and/or movie preferences could just make the difference between getting a deal and losing it.

People want to do business with people, so why not leverage all Web 2.0 technologies to get to know people you work and socialize with a bit better?

That's why my company, Serena Software, has recently encouraged all employees to get on Facebook. After all, we are people first, and then employees. Not the other way around.

KYLE ARTEAGA

A year ago I was registered (forced by a friend) on Viaduc that became Viadeo. Then I registered on LinkedIn and I was really impressed with the numbers of people I had fun working with but lost track of over time.

Recently I have discovered Xing, rising star amongst the professional networking tool. It is really pro and more exec centric. I encourage you to register for free and compare (www.xing.com).

JEAN-YVES THIBERT

Wal-Mart As a Symbol

The article "How Wal-Mart Lost Its IT Mojo" [Nov. 1; www.cio.com/article/143451] gives a fabulous account of how it's moved. Though for the targeted audience of *CIO*, it could have been more technical, statistical and with facts.

U.S. business model and economy is about product marketing/branding, and that's where they make their value creation. It shouldn't matter where they get their raw material.

I guess Wal-Mart is a symbol [of the] USA as a land of opportunity and innovation, and we should respect that.

JASPAL REKHI

Budget Battling Innovation?

I appreciate the sentiment expressed in "A Tale of Two CIOs" [Nov. 15; www.cio.com/article/154150], but disagree that innovation and cost consciousness are at cross purposes even most of the time, as seems to be implied by the article. In my view you can't be very good at innovation throwing money around.

I use budget constraints as a mechanism to force myself to be creative. It also helps me maintain solution focus. Throwing money at a problem is a good way to make it overly complex

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and burdensome. I also like to apply a quote from Albert Einstein when considering or planning new solutions: "Everything should be made as simple as possible, but not simpler."

GLEN BOYER

IT Working With Business

One key aspect of the CIO's role that was overlooked in "Let the Business Drive IT Strategy" [Nov. 1; www.cio.com/article/135202] and is overlooked in most organizations is the second letter in CIO: information. Technology is an enabler for the insights and analysis developed through having the right information in the right hands at the right time.

Too many IT professionals sit staunchly in the IT camp when the business needs them to solve prob-

lems requiring business knowledge. More CIOs will have a seat at the table where corporate strategy is developed when they are seen as integral to moving the business forward. That happens when they are information and insights driven.

MIKE KAROLEWICZ

I don't think that the role of the CIO is being diminished in any way. The examples cited in the article are interesting and self descriptive. CIOs when reporting to the CEO or COO most often have the insight of the business and do by and large work with the business leaders to create a higher return on the IT investments.

I agree technology for the sake of technology is not a good driver; rather, it is an enabler. Ultimately you would think that the leadership of any given

company, including the CIO, would focus its energies on growth, customer satisfaction and employee retention.

ZAHID MASOOD

CORRECTION

In Publisher Emeritus Gary Beach's Nov. 1 column, "No More Outsourcing" (www.cio.com/article/149301), the amount of every dollar that goes to supporting and maintaining IT infrastructure, as reported by Gartner, should have been 80 cents.

CIO regrets the error.

What Do You Think?

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trendlines

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NEW * HOT * UNEXPECTED

How to Save Your Job

CAREER Merrill Lynch CEO Stan O'Neal announced his retirement in October, six days after the company reported an \$8.4 billion loss. Citigroup CEO Chuck Prince also stepped down as his company announced its own \$17 billion hit. Time Warner, meanwhile, announced that CEO Dick Parsons planned to retire in December.

As CEOs turn over, "there's going to be concern about the future," says Vincent Milich, director of the IT effectiveness practice at Hay Group, a management consulting firm. CIOs can use the uncertainty to their advantage, Milich says. "You represent continuity in leadership. The organization will value that."

But others say CIO résumés should go out when a new CEO comes in. "Any CIO worth his salt is in touch with executive recruiters at a time like this," says Jim Noble, president of the Society for Information Management. Noble was the managing director of transformation and strategy at Merrill Lynch, and has been CIO at AOL Time Warner and Altria Group. "Chances are, a new boss will want to appoint his team," Noble says.

For example, Jim Keyes left as CEO of 7-Eleven to be CEO of Blockbuster in July. Two months later, Keith Morrow, who was CIO under Keyes at 7-Eleven, fol-

Continued on Page 16



Are You Sitting On or Using Your Assets?

ENTERPRISE SOFTWARE Businesses need to pay more attention to intangible assets such as core software, according to "Recognizing the True Value of Software Assets," a report released last month by business school INSEAD and U.K. software vendor Micro Focus. The goal: to manage those assets for value creation, not cost containment, says the report's author, Soumitra Dutta, INSEAD's chair of business and technology.

Almost 77 percent of the 250 CIOs and CFOs surveyed for the report (and 86 percent of U.S. respondents) call the software "critical" to their business strategy, but 60 percent of the respondents don't know the size of those core assets. (Just 52 percent of U.S. respondents could identify the size; only 12 percent of U.K. respondents had the foggiest notion.)

The problem is partly that these assets have been

built up over decades and partly because business units have been sneaking tools into the enterprise themselves.

Perhaps most surprising, the research shows that 29 percent of the CIOs and CFOs do not know the total amount they spend annually maintaining these core software assets. They do, however, know they have to improve on the communication front. Just 10 percent said their team did an "excellent" effort explaining the value of these assets to their bosses.

"Both CIOs and CFOs need to be communicating the business value of core software assets to the board and make it a priority to measure the value of their software assets," Dutta says. The survey respondents were split evenly between CIOs and CFOs at companies with revenues from \$100 million to \$1 billion-plus.

-Laurianne McLaughlin

New iPhone App Is a Master of Disaster

CONSUMER I.T. While Apple's iPhone has won over many consumers, the enterprise value of its unique interface has been questioned. But that may be changing. MIR3's new iPhone-based notification application enables IT admins and corporate executives to create, manage, send and receive wireless notifications from an iPhone or iPod when there's an emergency.

With a touch-based notification and command interface, this is one of the first business-minded apps from outside Apple that takes advantage of the iPhone's unique hardware and software.

MIR3 applications function interactively with any text- or voice-based communication device. Organizations, including 87 of the global Fortune 100 and the U.S. Air Force, use them for business continuity and disaster recovery. In an emergency, IT administrators can designate specific users to a group, create a customized notification and then send messages like "Is everything all right in your building?" Group members can respond with preset commands like "Yes" or "No, we need help." Responses can trigger automated tasks, connecting recipients to a conference call or sending specific information.

MIR3's new iPhone-based app not only enables people to send and receive alerts, but also allows them to create and manage distribution of such notifications, and act on them, with a few taps of an iPhone or iPod. (MIR3 hopes to offer similar versions for BlackBerry and Treo users later this year.)

The app can handle everyday problems, too, says Frank Mahdavi, chief strategy officer at MIR3. "An IT person is sitting, watching movies at home, when a server goes down," he says. "Our Web-services API sends a notification and then the IT employee opens up a portal, logs in and reboots the server on his iPhone."

Cool.

—Al Sacco

Where Have All the Vendors Gone?

CONSOLIDATION In case you haven't noticed, the big fish enterprise vendors have been gobbling up the little fish faster and faster as of late. And it isn't slowing down anytime soon.

85% of actively acquiring companies say they "expect to maintain or increase current-year levels of M&A activity in the coming 12 months."

50% of those companies expect to increase M&A spending.

SOURCE: The 451 Group survey of corporate development and strategy professionals

Save Your Job

Continued from Page 15

lowed Keyes to Blockbuster. "Jim knew technology can make all the difference in his success," says Noble.

New CEOs make personnel decisions within the first 60 days, so first impressions count, said Harvard Business School professor Kevin Coyne, writing in the *Harvard Business Review*.

When a new CEO comes on, Coyne wrote, "chances are high [other] executives will find themselves out the door."

Not good. And there's more.

Coyne studied the turnover rate among proxy-level executives—those included in the annual proxy statements filed by their companies to the Securities and Exchange Commission—at the biggest 1,000 companies in the U.S. from 2002 to 2004. Where the CEO remained, C-level executive turnover was 16 percent. When the CEO was replaced by someone outside the company, the rate soared to 40 percent.

The upshot is, when a new CEO enters, be prepared to prove your worth. Here's some advice on how to survive:

■ **Ask how you can help.** Coyne interviewed several newly minted CEOs, who said they were surprised by how few executives approached them to express support. "Demonstrate your willingness to go along with the program," he says.

■ **Show common sense.** Don't go on vacation as a new CEO arrives. Get close, if you aren't already, to key business leaders, Milich adds, to help them show good business results during this time of turmoil.

■ **Embrace change.** Heck, a new CEO might be a good thing, says Paul Groce, partner and leader of CTPPractice's CIO functional practice. "Executives may be happy to see changes occurring," he says. "People know when things at a company aren't going well."

—Kim S. Nash

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Get Ready for **CAMPAIGN 2.0**

POLITICS The presidential candidates, Republican and Democratic, are everywhere, if you spend any time online. Campaign 2008 is truly becoming Campaign 2.0.

★ **IT TAKES AN (ONLINE) VILLAGE.** On Eons.com, an online community for retiring baby boomers, Democrat **Hillary Clinton** has been given blogger and storyteller badges for posting frequently and sharing her life story. On Democrat **Barack Obama's** personal homepage on BlackPlanet.com you can watch his recent appearances on the *Tavis Smiley Show* and *The Tonight Show*. His page on the Latino community MiGente.com has a link to Obama TV en español.

★ **EVERYBODY LOVES VIDEO.** All the major candidates have their own YouTube channel (and MySpace and Facebook pages). In addition, a video project on 10Questions.com invites the candidates to post video answers to voter questions. As of late last month, Republican **Mike Huckabee** had uploaded nine responses addressing, among other things, Internet neutrality, whether the United States is a theocracy and whether marijuana should be legal. (Obama, so far, was the only other candidate to post responses.)

★ **ALL ABOUT THE LINKS.** As of late November, Republican **Rudy Giuliani** had 245 connections on social networking site LinkedIn. It's not difficult to imagine a game of "Six Degrees of Rudy" to see if the former New York mayor might be connected to someone you know.

★ **THE VIRTUAL CAMPAIGN.** Democrat **John Edwards** has built a "campaign central" on Second Life, which was covered on the Second Life News Network.

★ **ALL MASHED-UP.** Taking a page from Madison Avenue, Republican **Mitt Romney** is holding a contest for supporters to create video ads using images provided by the campaign site. (SlateV.com, the video service of *Slate* magazine, has already produced a short parody of the project.)

★ **PLAYING GAMES.** On Republican **John McCain's** website, JohnMcCain.com, you can play the animated "John & Hillary Game," and try to match questions with the correct candidates. (The game creators made the answers difficult to get wrong.)

—Esther Shein



GREAT GOOD FORTUNES

MONEY According to this year's "State of the CIO" survey (Page 77), CIOs are in the money, with their average annual compensation rising 28 percent over last year. But they're not alone in their good fortune. Starting salaries for all IT professionals will increase an average of 5.3 percent in 2008, according to Robert Half Technology's annual salary guide based on an analysis of thousands of job place-

ments by the U.S. offices of the IT consulting and staffing company.

Hiring managers should be prepared to shell out more to fill such in-demand jobs as lead applications developer, messaging administrator and data modeler, where base compensation is expected to be 7 percent higher than last year's forecast. Strong demand for technology workers is also predicted for 2008 in the financial services,

healthcare and commercial construction sectors.

In response, some companies are raising base compensation for new hires and offering added perks, including signing bonuses and equity incentives, according to Katherine Spencer Lee, executive director of Robert Half Technology.

So which jobs will see the greatest starting salary gains in 2008? The Half survey says:

» **Lead applications**

developers, with base compensation expected to rise 7.6 percent, to a range of **\$80,250 to \$108,000**.

» **Applications architects**, who should see their pay jump 7.5 percent, to a range between **\$87,250 and \$120,000**.

» **Messaging administrators**, whose starting salaries are forecast to increase 7.1 percent, to **\$55,000 to \$77,750** annually.

—Steff Gelston

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Happy Holidays! You've Been *Hacked*

SECURITY Wireless is everywhere. And that's a big problem for the retail industry, where wireless reigns in back rooms and showrooms. How secure is it all?

Not very, says a new report by Retail Systems Research partner Steve Rowen.

"In the store, wireless devices have made for enhanced consumer experience, better customer service and accurate, cost-effective transmission of transaction and inventory data," Rowen writes in "Safe without Wires: The Value of Securing Wireless Technologies." "In the supply chain, wireless technologies have proven incredibly valuable as well," he says.

But the value has come at a cost:

increased risk. Indeed, Rowen writes, "Theft of retailers' customer data is no longer just for 'hacks'; it has become very big business."

Read: organized crime.

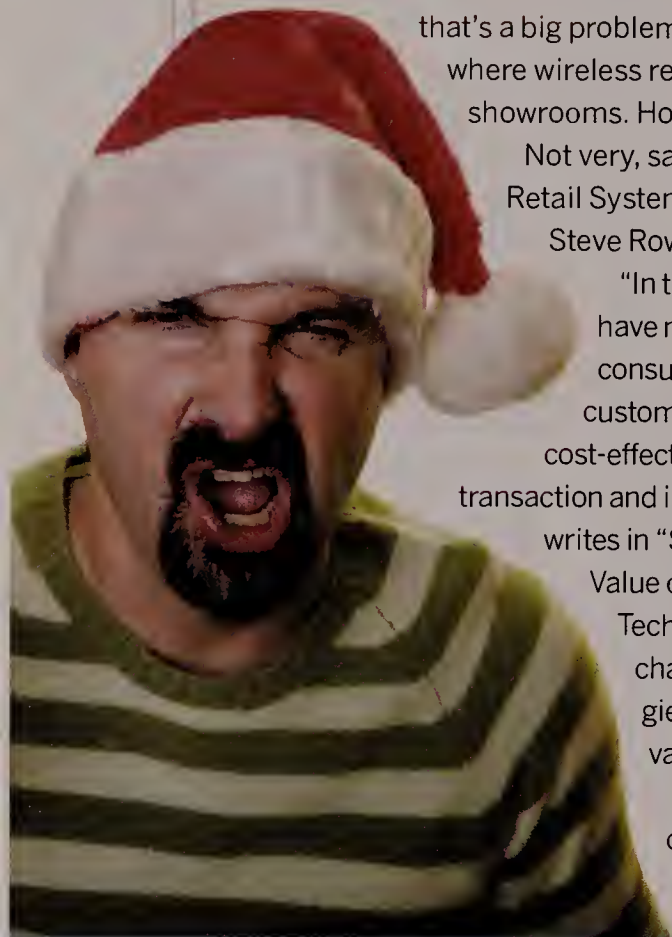
None of Rowen's recommendations for addressing wireless security are explicitly about technology; retailers need to start talking about security at all levels.

First, elevate the conversation. "The most successful security programs," he writes, "are those which gain the interest of C-level executives—early on."

Next, speak the right language. "By focusing on business drivers, wireless proponents can speak the language needed to realize the benefits of secure wireless solutions," Rowen notes. That means "a language based more on revenue generation than purely cost avoidance."

Last, set clear, realistically achievable objectives. "There is no shortage of conversation and 'quick fix' solutions to the customer data security dilemma," he writes. "However, winning retailers [avoid] the fruitless hair-on-fire trap, steadily tackling one attainable goal at a time."

—Thomas Wailgum



Getting Fired: Not the End of the World

ON THE MOVE Stuart Scott landed a new job pretty quickly after his very public termination by Microsoft, where he had served as CIO since 2005.

In early November, Microsoft announced that it had fired Scott for violating unnamed company policies. Three weeks later, on November 26, Scott became COO of Taylor, Bean & Whitaker Mortgage, a privately held lender based in Florida.

Scott's rapid rebound surprised many executive recruiters who didn't think he'd get a new gig so soon. Reynold Lewke, a recruiter with executive search firm Egon Zehnder International, guesses that Scott's negotiations

with Taylor, Bean had to have been in the works before Microsoft fired him. And "whoever was making the decisions [at Taylor, Bean]," says Lewke, wasn't put off by the Microsoft announcement.

Scott's hiring gives credence to the belief that getting fired—even getting fired with so much publicity—needn't be a career killer. It certainly wasn't for Scott.

"There's a long list of people who have had pretty terrible ousters and not recovered from them," says Martha Heller, managing director of executive search firm ZRG's IT leadership



Stuart Scott

practice. "But executives can recover if they play their cards right."

That means being open with prospective employers. The truth will always out, so it might as well come from you. Ousted executives should take responsibility for their mistakes and show that they've learned their lessons.

An executive who's been fired needs to keep his options open, including the possibility of relocating or switching industries. He should mine his network for new job opportunities. Contacts can vouch for his character and expertise.

—Meridith Levinson

CIO.COM Read Meridith Levinson's **MOVERS AND SHAKERS** blog for the latest moves. Find it at blogs.cio.com.

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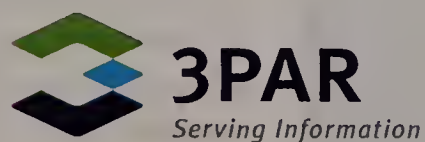


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Why Partnering Is Integral to IT Outsourcing Success



Executive Summary:

When it's time to select an outsourcer, look for a partner, not just a services provider. Cognizant's Two-in-a-Box™ relationship model enables clients to receive high-quality services while driving innovation and solutions that support long-term business growth. Read this white paper to learn:

- How an outsourcer working as a close and trusted business partner can bring benefits beyond cost savings
- How Cognizant's Two-in-a-Box model enables innovation
- How the dedicated Cognizant team serves as an extension of the client's IT organization to meet key business goals

A solid outsourcing relationship involves more than collecting requirements and delivering a solution that meets client needs. Some outsourcers default to the "thrown over the wall" style of development, with roots in an age when IT worked in isolation from the business. In this scenario, offshore project managers take on all decision-making while monitoring client needs from afar, only occasionally visiting the client site, typically when the project falls into crisis mode. Other outsourcers rely on "pass the baton," an approach often marred by an ever-changing roster of vendor representatives and teams that handle individual project phases and deliverables. They work in the absence of dedicated on-site resources who are responsible for ensuring the continuity of project success.

In a true outsourcing partnership, however, the service provider establishes an on-site presence within the client's organization, dedicating a highly experienced, senior manager who takes responsibility for monitoring the client's changing needs and serves as the client's primary point of contact with the provider. It's an ap-

proach employed by Cognizant Technology Solutions Corp. and its Two-in-a-Box relationship model.

With Two-in-a-Box, Cognizant dedicates a Client Partner – a senior leader who is highly experienced within a client's vertical market – to work at the client site and manage the customer relationship from the contract's get-go. The Client Partner works with a Delivery Manager, who oversees services delivery from any of Cognizant's 35 development facilities worldwide. Together, these managers ensure that the Cognizant team not only delivers the needed services but also works with the client to continuously add value to the outsourcing relationship. They are totally aligned with the client's business and technical environments.

A typical Client Partner:

- Is MBA trained
- Has 12 to 15 years of experience in IT services, with exceptional relationship building and management skills with senior IT managers and business managers
- Worked previously for a top-notch consulting firm
- Understands what's important for clients – from their business strategy and industry challenges, through their corporate and IT objectives

A typical Delivery Manager:

- Is technically minded, usually holding an advanced degree in mathematics, computer science or a related field
- Has 10-years-plus IT industry experience
- Understands what it takes to deliver superior IT that aligns with business objectives
- Has demonstrated experienced growing, grooming and managing an IT staff
- Has worked on various on-site/offshore delivery projects

Client benefits

The Two-in-a-Box model provides several key advantages, including:

- Exceptionally close relationships with clients through on-site teams focused on delivering business results that exceed expectations
- Tight strategic alignment between the client's IT strategy and business goals
- Strict accountability and governance through rigorous project management and adherence to best practices that mitigate risks associated with traditional offshore IT outsourcing approaches
- Continuous measurement of results to keep engagements on track
- Knowledge transfer from Cognizant to help clients facilitate continuous improvement

Cognizant's Two-in-a-Box model creates a tighter IT services partnership that helps global companies achieve better returns on their IT outsourcing initiatives. Importantly, Two-in-a-Box demonstrates the firm's commitment to ensuring client success. Cognizant sacrifices a part of its gross profit margin by investing in client-facing resources. In a typical engagement, an average of 30 percent of a Cognizant project team could reside at the client's operations, a figure that is typically higher than the norm in the offshoring sector. This helps drive high levels of client satisfaction: 81 percent of client executives polled in Cognizant's 2006 customer satisfaction said they were either "extremely satisfied" or "satisfied" with the Cognizant experience.

Elevated customer satisfaction is facilitated by the Client Partner, who spends at least 80 percent of his time at the client's location. The Client Partner meets regularly with the client's CIO, the senior IT team and business unit executives to understand the client's business, their goals and the changes the business is going through. Leveraging that understanding with his own industry-specific experience, the Client Partner becomes part of the client's leadership team, identifying new solutions and driving innovation. The Client Partner operates as the point person, removing from the client the burden of communicating business and technical requirements to the offshore Delivery Manager. This undoes the phenomenon of "death by distance" that often plagues offshore outsourcing relationships. No longer does the client's senior IT leadership team need to be on alert for early morning and/or late night conference calls to explain simple technical matters or, more important to head off imminent project challenges. Meanwhile, the Delivery Manager takes primary responsibility for ensuring that Cognizant developers, who are often distributed around the world, deliver the cost savings, speed to market and technical innovation that are expected by the client.

"Broadly speaking, there are two components in an outsourcing relationship. One is gaining an understanding of the client business and driving the relationship. The other is delivering services on a global basis. But, they have to come together to achieve the outcome our clients expect. These two are equal roles, but the only way to succeed is in making them work together," says Rajendra Mamodia, a former Cognizant Client Partner for Kimberly-Clark and now the North America director and practice head for Cognizant's consumer goods practice. "Customers benefit from a powerful solution, because a worldwide team is now aligned for a single outcome."

Early on in an engagement, Cognizant's Client Partner coordinates a kickoff meeting to ensure that the on-shore and offshore teams are in alignment with the cli-

ent goals. For example, when the Client Partner and on-site global team start defining goals and requirements, Cognizant team members are often drawn into the discussion via teleconference or travel to the client site. This builds client confidence and trust in the offshore team. At the same time, the outsourcing team develops a better understanding of how it can map its work to the client's needs and goals.

Two-in-a-Box provides Cognizant with an intimate view inside the client organization and serves as a key enabler for the company's Transform while Perform™ (TwP) methodology, which the IT services provider uses to ensure quicker and better returns on outsourcing. (See White Paper 3 in this series.)

With Two-in-a-Box, Cognizant can support today's workload and tomorrow's growth agenda while using IT to enable new business opportunities and efficiencies. According to a recent article in the *Harvard Business Review*,¹ Cognizant is unlike other global IT services providers in how it positions itself as a U.S.-based player with significant offshore resources. The article notes that the combination of arbitrage and adaptation "is just one element, albeit an important one, of a broad, cross-functional effort to get past what management sees as the key integration challenge in global offshoring: poor coordination between delivery and marketing."

For more information about Cognizant and Two-in-a-Box, visit www.cognizant.com/go/roo.

¹ "Managing Differences: The Central Challenge of Global Strategy," *Harvard Business Review*, March 2007.

Questions about ROO?

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About Cognizant

Cognizant is a leading provider of information technology, consulting and business process outsourcing services. The company applies a unique on-site/offshore model to deliver applications management, development, integration and reengineering; infrastructure management; and technology architecture, program and change management services. Cognizant dedicates its global technology and innovation know-how, industry expertise and worldwide resources to working with clients to make their businesses stronger.

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Passion for building stronger businesses

In Retail, Crime Is Mostly an Inside Job

IDENTITY THEFT As the data breach case against retailer TJX progresses in federal court, an October study released by the Center for Identity Management and Information Protection at Utica College finds that retailers are most vulnerable to identity theft by their own employees, and that financial services companies are the most likely businesses to suffer losses from identity theft-related crimes.

Researchers studied data supplied by the U.S. Secret Service about 517 cases it investigated between 2000 and 2006. And although most identity theft cases against companies were perpetrated by outsiders, among the 176 cases that were inside jobs, 44 percent targeted retailers.

No matter who perpetrated the crime, investigators reported individuals' personal information was stolen most often from a business, rather than through a family member or friend, from the person's home or online.

Other findings from the Center for Identity Management and Information Protection study include:

- In 45 percent of cases, offenders used stolen IDs to obtain credit. One-third used them to get cash and 23 percent used them to conceal their own identities.
- Perpetrators used the Internet to steal identities in only 20 percent of all cases.
- The more organized the thieves were, the more victims lost. In 57 percent of cases, a single defendant stole an average of \$22,500. Victims' losses rose to an average of \$42,700 in the 23 percent of cases in which there were two conspirators. Rings of five identity thieves, accounting for 4 percent of cases, captured more than \$84,000 from their victims on average.

—Elana Varon



The High Dangers of Low-Cost Providers

REGULATION IT execs will have to manage another layer of supply chain complexity if last month's Bush administration product inspection proposals are enacted.

After a rash of high-profile product recalls of tainted goods imported from China and other countries, President Bush's proposed Import Safety Action Plan calls for: identifying and targeting high-risk points in the global supply chain for products made for export to the U.S.; increasing the presence of American inspectors overseas; creating real-time data exchanges among exporters and federal agencies about products approved or rejected for shipment; and empowering the Food and Drug Administration to impose a mandatory recall of products deemed dangerous.

"If the administration succeeds, there's an implication for lead times you need to give your suppliers. More testing takes more time," says Simon Jacobson, senior research analyst at AMR Research in Boston, adding, "CIOs will want to monitor what those companies are doing and catch defects before products get shipped."

Joe Barkai, a practice director at Manufacturing Insights, says that Bush's proposal is more about after-the-fact enforcement than about preventing product defects.

"Companies will need more visibility into the internal inspection processes of their foreign manufacturers. It might mean U.S. companies don't do business with overseas companies that can't or won't provide that visibility," says Barkai, whose consulting firm, like CIO, is owned by IDG.

"Maybe this will result in companies sourcing no longer on lowest cost," Barkai says, "but on what those suppliers can provide in terms of product testing and reliable data about product testing. Lowest cost suppliers may actually cost more, if you consider the lifetime cost of your product. Recalls," he concludes, "are expensive."

—Kim S. Nash

CIO2CIO 2 PERSPECTIVES

Today's IT Leaders on Market Trends

OPTIMIZING VIRTUALIZATION INVESTMENTS

As virtualization moves into the mainstream, CIOs must eliminate complexity and demonstrate ROI

CIOs know that, in addition to investing in disruptive technologies and reducing costs, the availability and performance of IT systems that control business processes are paramount to success. Virtualization fulfills these requirements. In its relatively short existence, virtualization technology has enabled many organizations to realize tangible benefits, including cost savings and increased productivity.

A recent survey finds that 88 percent of IT leaders in the U.S. are already investing in virtualization initiatives. According to the survey, conducted by IDG Research Services, 63 percent of the respondents have already achieved success with server virtualization, 40 percent with storage virtualization and 30 percent with application virtualization. Regarding server virtualization deployments, the respondents cite such benefits as easier hardware provisioning and software deployment (63 percent), lower total cost of ownership (53 percent), and more flexible development and testing environments (51 percent).

However, CIOs and IT leaders admit that they are struggling with the ability to properly manage their newly virtualized infrastructures. They certainly see the need to do so—in the IDG survey, nearly three-quarters (74 percent) say it is critical or very important to be able to centralize the management of multiplatform virtualized and physical environments.

"Successful management of the virtualization infrastructure is essential in order to optimize these technol-

ogy initiatives, enable documented returns on investments and enhance productivity across the enterprise," says Paula Daley, vice president of product marketing at CA, one of the world's largest IT management software companies.



Virtualization Moves into the Mainstream

Virtualization has rapidly evolved from an emerging technology, through early-adopter status, to the point where it is now common in many organizations. Thirty-three percent of the IDG survey respondents describe the virtualization market today as "extremely" or "very" mature, while another 50 percent think it is mature. They also say they are now deploying or intend to deploy within the next 18 months virtualization initiatives in many mission-critical areas of the business, including account-

ing/finance and IT infrastructure management (both 58 percent), customer service (49 percent) and application development (41 percent).

To date, server and storage virtualization deployments are most common, while application and enterprise data center deployments are picking up speed. Organizations are primarily using virtualization within an application-deployment environment and in production to support both mission- and non-mission-critical business initiatives.

About CIO2CIO

Perspectives: This peer-based thought leadership program analyzes quantitative research and tests it via qualitative interviews with actual CIOs. The resulting executive insight is then disseminated via CXO's multimedia assets. To learn more about CIO2CIO Perspectives, please contact mavery@cxo.com.

CIO2CIO 2 PERSPECTIVES

Today's IT Leaders on Market Trends

Despite the steady intent of IT leaders to invest in a variety of virtualization initiatives, key management challenges remain. For example, nearly half (47 percent) of IDG survey respondents say the lack of the right IT skill sets to support virtual technologies is a significant obstacle to managing their server virtualization environments. Yet this is the latest version of the old IT dilemma about not only finding but also retaining workers with specific cutting-edge skill sets. As virtualization becomes more popular, the number of people with expertise in it will grow, as will the size of the labor pool.

Software licensing issues are a concern to 46 percent of the IT executives surveyed. The majority (79 percent) recognize that existing software licensing models for the physical environment do not apply to the virtual server environment. Digging deeper, 40 percent lean toward a usage-based pricing model, in which customers are charged based on the computing power used; 26 percent prefer configuration-based or socket-based pricing, where customers are charged for the use of the full processor socket regardless of how many applications are run on it. Overall, it seems that IT leaders will have to work together with vendors to find solutions in this sensitive area.

Measuring return on investment is another critical management challenge. CIOs are constantly under pressure to demonstrate business value from their technology investments, so being able to prove ROI is essential. Yet only one-third (33 percent) of the survey respondents say they have a method in place to measure the ROI of their virtualization initiatives. Surprisingly, 54 percent are confident to extremely confident that their organizations are maximizing their virtualization ROI. They simply need the tools to prove it and will have to turn to vendors that can provide them.

The Need for Management Tools

Specific challenges aside, managing virtual server environ-

ments is top of mind for IT executives, with 60 percent of survey respondents rating this as a high or critical IT priority. Among the top capabilities they need to demonstrate in their management efforts are performance and utilization (85 percent), security (79 percent), automation (71 percent) and provisioning (64 percent).

Here is where a virtualization management solution can help. IT executives must go beyond relying on an assortment of point platform-based management tools to one that centralizes virtual, physical and clustered envi-

ronments. Doing so will reduce complexity, provide real-time performance data and ensure that IT has the necessary information so that virtual server resources are available and optimized.

Implementing virtualization technologies introduces new challenges for CIOs, who must come to terms with the disruptive yet beneficial qualities that these deployments bring. IT leaders are on the hot seat to prove that virtualization offers positive ROI, that both virtual and physical resources

are being used efficiently, and that they are working to align the IT organization with the business's needs.

Going forward, it will be critical for organizations to work with partners that can provide the necessary tools and services to realize these management goals. Being able to dynamically manage virtual and physical environments improves operational efficiency, and ensures that IT investments are optimized and generating competitive advantages for the business.

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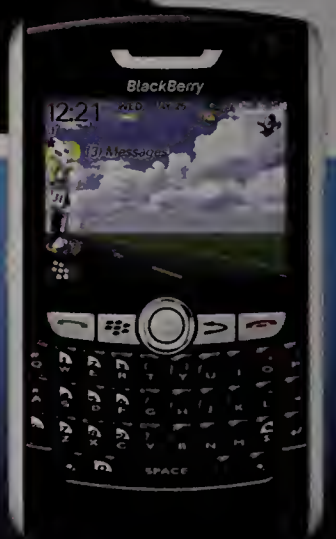


Dr. John Halamka
CIO, Harvard Medical School

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BlackBerry

ESSENTIAL

FROM INCEPTION TO IMPLEMENTATION—I.T. THAT MATTERS

technology

Edited by
Laurianne McLaughlin
lmclaughlin@cio.com



What's the only thing the enterprise user loves more than his BlackBerry? The laptop PC. That relationship will soon be spiced up by slimmer designs, smarter storage and faster boot-ups.

What's Next for Notebooks

BY JOHN EDWARDS

MOBILE | Notebook vendors should pay more attention to their enterprise customers, says Gabriel Vitus, IT director of the Vancouver, B.C.-based Certified General Accountants Association of Canada. "Not only on the big issues, but also on the little things," he says. "Like button placement."

Even today, many CIOs feel that too many notebooks weigh too much, fail to keep critical information secure or have batteries that conk out in the middle of a job.

"There's plenty of room for improvement," Vitus says.

Yet as 2008 dawns, CIOs have some reason for optimism. Notebook makers are prioritizing improvements to design, storage and displays that could make the notebooks of 2011 quite different than the workhorses of today.

"Notebooks are rapidly evolving and improving," says Rob Enderle, principal analyst of the Enderle Group consultancy. Does a 3-pound laptop that runs some eight hours sound good to you? Then you may like the machines of 2011. If one company has its way, you may also be able to use those machines for quick e-mails and Web browsing without firing up Windows.

The Obesity Crisis

Like a growing percentage of the U.S. population, notebooks face an obesity crisis. Vendors must respond to increasing performance demands while keeping their products from inflating to unacceptable dimensions.

To balance the parameters of weight and size, battery life, durability, security and performance, notebook vendors must work as carefully and precisely as a Swiss watchmaker. And to counter laptop bloat, vendors are looking to lighter materials, more highly integrated com-

During the next few years, solid state technology's biggest challenges—its high cost and relatively low capacity (the current ceiling is about 64GB per solid state drive)—should fade away, Shim says. "The benefits will be enormous," he says. "By getting rid of spinning hard drives, you will both boost the seek time and save energy."

Within three years, about 15 percent of enterprise-class notebooks will have pure solid state drives, predicts Jack E. Gold, president and principal analyst of J. Gold Associates, a technology

"Flash memory will change notebooks by providing a storage medium that's faster, less fragile and more power friendly." —Richard Shim, research manager, IDC

ponents and new space-saving design approaches.

"Design is an overarching trend," says Enderle. "Dell has tripled the size of its design staff," he says, adding that Lenovo and Toshiba will continue to stand out among mobile vendors known for cutting-edge designs. "Design is becoming a key battlefield, and buyers will ultimately benefit by receiving more powerful and compact notebooks," Enderle says.

What kind of design changes are we talking about? Look for more case colors, more metals, sleeker designs, brighter displays, better speakers, better integrated cameras, quieter fans, lighted keyboards, secondary displays and more exotic screen hinges, Enderle says.

At the same time, a storage revolution promises to attack several notebook problems, including weight, speed and power drain, says Richard Shim, research manager for IDC's personal computing program. "Solid state drives—flash memory—will change notebooks by providing a medium that's faster, less fragile and more power friendly," he says.

strategy consulting firm. "The rest will slowly transition to hybrid drives where you have magnetics but also a front-end solid state component to speed them up, which also helps power management," he says.

A New Display

Just as solid state memory could transform notebook storage, OLED (organic light emitting diode) displays could radically change the way users look at their systems. But this technology looks to be a bit further out.

Compared to conventional LCDs, organic displays are thinner, brighter and less power hungry. The technology already serves a niche market—small, high-quality displays for mobile phones and media players. Notebook-sized 10- to 12-inch organic display prototypes shown by Sony in early 2007 offer an eye-pleasing 1-million-to-one contrast ratio.

Because organic displays emit light rather than reflect it, the screens provide significantly better outdoor viewing than most current notebook LCDs, which wash out in sunlight.

Your Laptop, Circa 2011

What might enterprise notebooks look like in three years? Here's the vision from Kevin Wrenn, senior vice president of PC business operations for Fujitsu Computer Systems: "The ideal notebook in three years will weigh 3 pounds, offer a 14-inch screen [and] deliver eight hours of battery life," he says.

Analysts like Jack E. Gold, president and principal analyst of J. Gold Associates, a technology strategy consulting firm, concur. Three-pound thin and light machines will offer eight-plus hours of juice, Gold says.

Integrated support for WiMax or another type of wireless wide area network (WWAN) will also be standard, Wrenn says. "Integrated WWAN will be a must," he says.

On the storage front, Wrenn believes that hard drive capacity will soar beyond 300GB and solid state drives will surpass 100GB. "Once ubiquitous wireless is achieved, online storage will gain in popularity," he predicts.

Notebook operating time will be extended through automated resource management combined with slightly higher capacity battery cells. "By doing this effectively, we are able to turn off devices when not needed, thus saving power and reducing heat," Wrenn notes. "Expect this trend to continue, but in addition we will see battery capacity creep up in ratings." Wrenn believes the transition from square to rectangular "widescreen" displays will be all but completed by 2009. But flexible OLED (organic light emitting diode) displays are at least four years away for large displays in laptops, predicts Wrenn.

—J.E.



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Flexible organic displays are also more or less unbreakable, says Robert Street, a senior research fellow at the Palo Alto Research Center. "That would be a huge benefit in notebooks, especially in ruggedized models," he notes.

The problem is, manufacturers haven't figured out how to affordably mass produce them yet. (Last October, Sony announced an 11-inch OLED TV display, priced at about \$1,700.)

Building affordable organic displays into notebooks will require transforming laboratory techniques into affordable processes for volume production. "We think that an inkjet printing-based approach shows great promise," Street says. He says it may be only a couple of years before the first notebooks featuring organic displays begin appearing on the market. Some notebook vendors say the wait for OLED's debut may be more like four years: See "Your Laptop, Circa 2011," Page 28.

Energy Crisis

Dim displays can be annoying, but poor battery life may be the biggest gripe among notebook users today—and unfortunately, there's no brilliant new battery technology waiting in the wings.

Why are notebook users so cranky about batteries? For starters, while battery technology has progressed markedly over the past several years, powerful microprocessors, wireless transceivers and other enhanced components have more than gobbled up those energy gains.

Lithium-ion batteries remain the current gold standard for notebooks, and notebook makers say they're not expecting a successor that supplies more notebook power without driving up system weight or size anytime soon.

Instead, today's notebook makers are focusing on other power-saving techniques, such as intelligently throttling back the power to various parts.

"I'm not anticipating any significant change in battery technology in the fore-

"The idea of FailSafe is not only that you can locate, very quickly, a stolen notebook, but wipe its hard drive clean."

—Rob Enderle, principal analyst, Enderle Group consultancy

seeable future," says Brett McNally, senior manager of Dell's Latitude notebook PC product group. "To provide longer battery life, we'll have to look toward optimizing devices by analyzing user behavior and saving power consumption wherever we can," he says. "Right now, that's the best approach."

Stepping Up Security

On the security side, most CIOs still live in fear of lost notebooks. But that's changing, as encryption and options like fingerprint readers become easier to manage and more powerful.

Companies such as Absolute Software already offer Computrace, a "LoJack for laptops" type of service. This helps enterprises track down, lock up and recover errant notebooks by tracing IP addresses transmitted by stolen machines.

Phoenix Technologies, best known for supplying BIOS software to PC vendors, wants to take the LoJack approach to the next level. Its new FailSafe notebook management system, which notebook makers can embed into the PC's core firmware, helps track, control and recover lost or stolen notebooks. Users can encrypt, lock and even destroy data on lost laptops to protect sensitive or private information.

"The idea is not only that you can locate, very quickly, a stolen notebook, but wipe its hard drive clean," Enderle says. "By putting the code in BIOS, that makes it even more difficult to remove,

or even know it's there." Look for FailSafe in notebooks starting in mid-2008, Phoenix says.

Perhaps even more intriguing, Phoenix is pushing embedded virtualization technology for laptops that it calls HyperSpace. This technology would let notebook users boot up in seconds and use applications such as e-mail, a media player and a Web browser without firing up Windows. (If you've ever used an Apple MacBook that powers up in seconds, you know how appealing this sounds, compared to waiting for Windows to load.) Phoenix hopes the first laptops with HyperSpace embedded in them will appear in 2008.

"Out There" Ideas

Overall, enterprise notebook vendors tend to have one trait in common with CIOs: They treat new technologies conservatively. That means some much-discussed ideas take years to actually crack into enterprise machines. What technologies remain stuck in neutral?

"People still talk about fuel cell [batteries], and there are still quite a few companies that think they'll put fuel cells into notebooks within the next few years," Gold says. But he doubts that notebook users are eager to carry vials of volatile liquids in their briefcases. "That's still kind of out there," he says.

This suits CIOs including Vitus just fine. "We're simply looking for affordable notebooks that allow us to work more efficiently and productively," he says. "We'll leave the gee-whiz to somebody else." **CIO**

Lock IT Up

For advice on how to make data encryption part of your mobile PC strategy, see **HOW TO LOCK UP LAPTOP SECURITY** www.cio.com/article/147900.

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John Edwards is an Arizona-based freelance writer. To comment on this story, go to www.cio.com/article/156550.



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When You're a Leader, Everyone Is Watching You

You can use simple but powerful actions to communicate your leadership agenda



You're not paranoid. Everyone is watching you. Fact is, typical executives feel like they are living in The Police song "Every Breath You Take." Everyone is watching "every move you make, every bond you break, every step you take..." for a sign of who you are and what you care about.

The realization is daunting to new executives. I remember my first week as a

CIO. I couldn't walk down a hallway without wondering if I was suffering from a wardrobe malfunction.

There is power in all the attention—if you use it wisely. We all know stories of leaders who, through simple but powerful actions, quickly communicated their leadership agenda. I recently heard about a new superintendent of a school district who, in response to some neighborhood complaints about kids walking on homeowners' lawns, took the time to drive down to observe the trampling in action and resolve the situation. What made the story worth repeating was that the superintendent's behavior stood in stark contrast to that of the local principal who had simply dismissed the issue as one outside the school's control. What made the story powerful was that it was clear to everyone that the superintendent intentionally selected the

incident to communicate in actions what he had already communicated in words—that he expected the principals to know and take care of the kids and their community.

Unlike the superintendent, many leaders unconsciously condone behaviors that, if questioned, they would profess to oppose. I can think of CIOs who signaled to their organizations that teamwork was unimportant (by gossiping), that integrity was situational (by accepting gifts from vendors), that business collaboration was an elective (by spending most of their time in their office) and that strategy trumped results (by devoting most of their time to ideas versus deliverables).

The superintendent could have ignored the situation. Instead, he chose to demonstrate what it means to *get close to the customer* by making clear



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the priority that should be placed on feedback from the community and the kids. Similarly, a CIO who is interested in conveying the same message can do so by spending time talking with external customers and building relationships with business counterparts.

The key to powerful symbolic actions is that they are focused, unexpected and personal. Don't muddy the water by leveraging every teachable moment. Your behavior will be viewed as manic rather than measured. Choose behaviors that are in stark contrast to the past so that the stories are memorable and will be repeated. Finally, lead by example by demonstrating the behavior that you expect others to emulate. Here are some suggestions for dealing with particular challenges.

If your organization is troubled with *execution* issues, you can convey urgency by getting close to the problem. Consider the CIO who, frustrated by the Keystone Kops approach to production issues, asked to be informed of any issue impacting more than five people. Not only did the issues get resolved faster, but the CIO shifted the focus from problem resolution to prevention by asking, "What do we need to do to make sure this never happens again?" over and over until that question started being asked at lower levels.

If you want your leaders to focus their priorities, be sure that you are clear about yours. Leaders keep their organizations on track by frequently referring to overarching goals when making key decisions and developing not only "start" but also "stop" lists when setting objectives and developing plans.

If you want to communicate a *sense of urgency*, use time boxing and demonstrate flexibility on cost and scope. Follow the lead of a CIO who introduced the term "30-day wonder" to a doubtful organization and then helped staff members amaze themselves as they delivered faster than ever before.

If you want to encourage *innovation*, select a project to personally lead and provide seed money to those who are willing to take risks and lead change. If you want to instill a performance-oriented, *accountable* culture, remove the senior-level leader who is obviously phoning it in. If you want to promote *teamwork*, be open about your weaknesses, ask for and respond to feedback, call out unproductive behaviors such as gossip and force your leaders to have difficult conversations face to face.

Leading change takes more than compelling strategies, great hiring and moving speeches. Smart leaders understand how to leverage the attention focused on them by using teachable moments to convey their leadership agenda. Through actions that are simple, powerful and symbolic, leaders can quickly communicate their agenda and avoid the sense of impotence and dread that comes from relying on others to communicate it for them.

Reader Q&A

Q: How can you tell if you are sending the right message? Actions are subject to mistranslation. How can a CIO get feedback to correct a wrong impression?

A: Symbolic action is about doing things to reinforce your verbal messages and eliminating actions that conflict with what you intend to communicate. It starts with a strong point of view of your strategic opportunities and how you want others to behave. For some leaders, the opportunity is to eliminate conflicting behaviors. In other cases, it's leading by example. Confidential feedback can identify behaviors that aren't working, although it's tough to interpret and identify substitute behaviors without some help. Since you can't ask those you intend to influence (it sounds feeble to ask, "How should I behave so I get others to do what I want?"), it makes sense to ask a trusted adviser, perhaps someone in human resources, a colleague or friend, or a coach.

Q: I will be reorganizing my IT department. What actions can I take to convey the need for this action?

A: You need to communicate both logically and emotionally. Logic ("Why are we doing this?") is easier. It can be expressed in traditional forums by sharing the enterprise and IT challenges, alternatives and implications. Emotion ("What about me?") is trickier. It must address the fundamentals of motivation: equity, achievement and connection. Equity requires treating others fairly and respectfully. Achievement entails supporting the goals and motivators of others.

Connection means making others feel part of a community. For your reorganization, powerful symbolic actions include communi-

Collected Wisdom

To read all of **SUSAN CRAMM's** answers to leadership **QUESTIONS**, go to **www.cio.com/author/102853**.

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cating individually or in small groups to discuss the reasons for change, ensuring that reductions impact all levels, asking where people want to be in the new organization, providing transition support where needed, and being on the front lines to listen, empathize and inspire. **CIO**

Susan Cramm is the founder and president of Valuedance, an executive coaching firm in San Clemente, Calif. You can e-mail feedback to susan@valuedance.com.





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You Say Yes, You Mean No

You nod when business colleagues ask for something new, but you don't really mean it. That won't fly anymore. Here's how to adjust your attitude (and your team's).

When it comes to requests from business peers, IT organizations typically put on a happy face. From the CIO to the help desk, staffers try to fit new systems into the context of the old, get changes onto the list of prioritized projects and get a grip on emerging technologies. But behind the smiles, let's face it: The job of an IT organization is to protect information with standards, pre-

serve prioritized investments and minimize risk.

In fact, to do the job has meant finding ways to keep smiling and still say no: We can't, we shouldn't and we won't. We don't support Treos when we have standardized on BlackBerry. And of course, saying no also left behind a prescriptive echo: Use this, wait for that. But times have changed, and IT is poorly positioned to cling to the "it's our policy" refrain. Everybody in the enterprise wants what he wants, whether or not it's within your plan. And IT departments have to figure out how to say yes more often.

So, you're asking, What the heck are we supposed to do when we can't keep loading new demands onto our already sagging plates? And how are we supposed to know what users really want, anyway? The answer involves some wrenching behavioral and structural changes in IT.

The New End User

In the old days, the only way employees could access most software or hook up a new piece of hardware was with help. The exceptional super-user was just that. Today, the list of tools an employee can use without IT help takes your breath away. Between the USB slots in laptops, social networking sites, hosted applications, open-source and easily downloaded tools, it's a new day in the office. At home, many employees are running mini IT departments for their spouses and kids. And Sue in accounting expects to be able to connect her work laptop to the Internet through her home wireless network.

The new end users ask for more things. It's better for IT execs who don't want to say no to be tuned in enough to know what these users are about to ask. As Rich Fagan, CIO of Caltech, notes: "We know that



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when the iPhone shows up in the store, the next day faculty members will be looking for help, so we are prepared to try.” When Microsoft Vista launched, the CIO of a European airline sent an e-mail explaining why its rollout won’t be for at least a year. But it’s not enough to head requests off at the inbox—it’s reactive and defensive. Here’s what you need to do instead.

Four Ways to Get to Yes

1. Energize a curious culture. Alastair Behenna, the CIO of Harvey Nash, a global talent management firm, figures out what emerging technologies are all about, so when business users come with ideas, he knows what they’re talking about.

He’s explored mash-ups, how to create an avatar on Second Life and what Salesforce.com can do.

More important, he makes sure his staff experiments, too.

“We have a lab where our team—from the help desk to the Web folks—is encouraged to spend as much as 10 percent of its time figuring out if there

is commercial benefit to something [new].” This approach enables him to present end users with technologies that they will benefit from before they request them, or be ready with a proof of concept when they do ask for something.

2. Create a common language. Like any foreign language, the technobabbling of IT creates frustrating barriers. Behenna observes that IT has developed a language that once gave it power over the business. But that language has in turn made IT weak. End users ignore what they don’t understand, corporate systems wither on the vine and then, Behenna says, “for IT, failure will come as a complete surprise!”

How to fix the dialogue? Use what end users know as a starting point for a conversation. “We should hear a request and say, ‘Let’s discover how best to do what you ask,’” says Behenna. “Let’s help you make an informed choice by familiarizing you with what we can support today and then we will see how we can help with what you want to do.”

3. Push your staff out of its comfort zone. Take another look at org structures and physical locations to make sure that as many people as possible from all levels of your organization spend as much time as they can with end users.

The CIO at one chemicals company sends his staff into the

Do You Just Talk Innovation?

Laurie Orlov ponders **THE CEO-CIO DISCONNECT** in her blog. Visit advice.cio.com/laurie_m_orlov/c_level_execs_miss_the_business_model_innovation_boat.

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The DNA for performance evolution.

field and assigns everyone a metric to meet—for example, improving customer service. At a telecom firm, IT staffers visit “work centers” such as customer care. They participate in calls with customers to find ways that processes can be automated.

Once outside the comfortable walls of IT and talking with end users, IT people can identify improvements to business operations that have never been requested but would be highly valued—like automatic notification of customers when service tickets are closed. In this way, IT can collaborate—get to yes—with the service staff to streamline work.

4. Learn how to sell. Being able to sell its services is an essential (and often missing) ingredient for IT organizations to move from saying no to being capable of saying, Yes, let's see how we can help.

Imagine that your IT infrastructure and applications became revenue generators, and think how the staff would interact with its paying customers. The IT staff would need relationship management training. All conversations would have a sales, marketing or services dimension.

This happened at Security Benefit Group, where Dave Keith was CIO from 1999 to 2006. After Dave led IT's redesign of the company's systems, he led an initiative to launch a business

process outsourcing (BPO) service running on the new environment. Eventually, the initiative became a revenue-generating division of the company. IT workers were spun off to staff the new product group and Keith became that unit's CEO, according to a report about the initiative at the time. One of Keith's staffers, trained in relationship management, went out and closed several new business deals. Much to this person's surprise, he learned he was capable of selling—despite his legacy in IT.

Leaders must move IT from a no to a yes mind-set. But miracles won't make it happen. You need to set the tone.

If you agree that collaboration trumps proscription and that anticipating needs is preferable to reacting, it's time to inspire and train your staff to behave differently. Help them gain relationship skills. Send them out to learn how work is performed and how technology can be used. And perhaps the next time you or your team members say you'd love to help, you'll really mean it. **CIO**

Laurie M. Orlov does research and consulting on business and technology strategy. Contact her at laurie.orlov@gmail.com. To comment on this story, go to the online version at www.cio.com/article/155400.



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THE State *of the* CIO 2008

The value CIOs can bring to the enterprise
is limited only by their energy and
imagination... and sometimes
by organizations that just don't get it

BY KIM S. NASH

FOR SOME CIOs, there's no separation between IT and business.

For others, a gulf, wide and deep, undercuts their ability to do, or even define, their jobs.

In our seventh annual "State of the CIO" survey, you told us about the problems you face in this turbulent world of new technologies and tight budgets, a world in which the role of the CIO is reconsidered, reevaluated



Becky Blalock

TRANSFORMATIONAL CIO

TITLE SVP and CIO of Southern Co., \$14.2 billion electric utility

CV Five years as CIO of Southern; one year as CIO of Georgia Power division; 29 years at the company

REPORTS TO President of Shared Services

PROJECTS IN MOTION

Rolling out new ERP system with IBM and Accenture.... Installing new system for automated meter reading.... Introduced outsourcing to a sometimes reluctant staff, but making it work.

BLALOCK SAYS To make sure she's giving Southern its money's worth, she periodically performs market tests to compare outsourcing prices to see what outsourcers would charge for the same knowledge and services that her in-house people provide. Then she sets up her IT group to beat those prices, which she can do, she says, because unlike an outsourcer, "I don't have to have a profit built in." Managing outsourcing, she believes, is a critical skill for CIOs today.

"It's not just how you deliver technology, but how you manage someone else who's delivering it. That's where IT is heading."

-K.S.N.

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The Big Picture



Kevin Bott

TRANSFORMATIONAL CIO

TITLE SVP and CIO of Ryder System, \$6.3 billion global transportation and supply chain solutions company

CV Two years as CIO; 12 years with company

REPORTS TO CFO

PROJECTS IN MOTION

Six months into a three-year plan to update critical logistics systems and processes.... Includes replacing transportation operations system and adding telematics devices to entire supply chain solutions fleet.... Expanding Ryder's freight billing app to more customers, enabling them to access data warehouse through a secured website and run reports about their transportation jobs.... Adopted a high school in south Florida to talk to kids about IT careers to address looming talent shortage.

BOTT SAYS Offshore outsourcing is relatively new at Ryder, and Bott has had to help his staff adjust. "We've recognized that you can move jobs offshore [and] increase productivity in operations." Twice a year, he holds webinars for employees worldwide to talk about Ryder's competitive position and what part IT plays. "I give people as much information as we can." —K.S.N.

and reimagined almost on a daily basis.

Some of our 558 respondents, all heads of IT in their enterprises, are faring quite well. They're bringing creativity and new revenue to their businesses, and they're being rewarded with new responsibilities in operations, for example, or customer service.

Others are finding this new world difficult to navigate.

But before we can talk about challenge and change—constants, it seems, in the CIO's universe—and about what forms they've taken this year and will take in the year ahead, we first have to cut through some static.

The language often used to frame the CIO experience does little to reveal the nature of the CIO's work. Today's IT lexicon—which bandies terms such

as "innovation" and "alignment" and "ROI"—disguises the reality of being a CIO and hides the obstacles and opportunities that await the practitioners of the IT art and discipline.

"Henderson, we need to innovate right now to achieve alignment."

"That's right, Bartow. And after that, we'll generate a positive ROI for our stakeholders."

Hold on. Nobody talks like that and that's not what you do all day.

Metaphors, which breed buzzwords, attempt to explain one idea by substituting another; for example, "innovation" replaces "make money." But these substitutions frequently obfuscate. And CIOs don't have time for that. CIOs excel at thinking about what's possible. And doable.

So let's talk about what's real.



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The Big Picture



Raj Datt

FUNCTION HEAD CIO

TITLE VP and CIO of Kennametal, \$2.4 billion supplier of tooling and engineered components

CV CIO since September 2006; previously VP and CIO for Panasonic Automotive Systems Company of North America

REPORTS TO CEO

PROJECTS IN MOTION

To ensure that Kennametal has the tools to meet customer needs in 60 countries, deployed BlackBerry handhelds to sales staff to provide real-time prices, inventory availability and customer order status.... To ensure sales and operations are aligned, recently upgraded to a Lotus Quickr and Sametime software suite, allowing for document sharing and collaboration on key projects.... Other critical technologies include ERP system from SAP, real-time application and network monitoring from Indicative, tiered storage from EMC, and J2EE stack for e-business solutioning.

DATT SAYS "Kennametal's IT strategy is guided by our DRIVE methodology: Deliver the Right Information, Value and Excellence." The framework falls within Kennametal IT's strategy of leveraging Lean, Six Sigma and CMMi and is quickly becoming a best business practice within Kennametal. **-C.G.L.**

Stop Talking About Alignment

We can't imagine a CIO who doesn't know that technology must support the business's processes and goals. If you don't understand that, nothing in this survey will help you.

In our 2008 "State of the CIO" survey, 82 percent of respondents said that align-

ing IT and business was their number-one activity. Of course it was. Does a therapist listen? Does a general command?

It's clear, however, that CIOs who worry about alignment conceive of themselves, their function and their department as a thing apart. Whether that's a problem of their own making or a dysfunction generated by their executive peers and

their enterprise's culture, these CIOs have already lost. As Roger Parks, VP of information technology and CIO at J.R. Simplot, a \$4.2 billion agribusiness, puts it, "If other senior executives don't see you as one of them, you usually can't change their minds. You have to realize that."

"The IT discipline still has some

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The Big Picture

maturing to do," says Rick Roy, senior vice president of customer operations at CUNA Mutual Group. Before he took over Customer operations, Roy was CIO at the financial services company from 2003 to 2005 when it had \$15.2 billion in assets. "I don't talk about aligning customer service operations with the business," says Roy. "The CFO doesn't talk about financial alignment with the business. So why say 'align IT and the business?'"

"Language informs approach."

So let's stop talking about alignment. It marks CIOs as outsiders.

Stop Talking About Innovation

Innovation, as commonly used today, really means devising new ways to keep the enterprise profitable. What CIO, what business leader, fails to understand that that's the essence of his job? Innovation is not a task. One doesn't *do* innovation. One doesn't (or shouldn't) have an innovation department, led by a chief innovator.

CIOs who struggle to innovate—*Some-how! Some way! Maybe every Tuesday from one o'clock to two!*—miss the fact that all good leaders strive for better ways of working.

Sixty-five percent of our respondents reported that generating ideas for business innovation through technology is not only a significant or dominant part of their jobs but is largely how their success is measured. That's up from 56 percent last year. So there's no question that innovation increasingly has become an expectation.

But one wonders if at those companies where innovation is a success metric the CIO's performance review offers a checkbox: "*Did Henderson innovate this year? Yes or No?*"

This use of the word "innovation," as if it described something new and different in IT, frustrates some CIOs. It's one with "alignment," scoffs Randy Poppell, CIO and senior VP of strategic planning at UniGroup, a \$2.3 billion transportation and relocation services company. "We all need to do it," he says. "But not

just in IT. Across the company."

Innovation is not an IT-centric challenge; it's not something anyone can do alone. As Michael Roberts, director of global IT strategy and planning at Citigroup, the \$160 billion financial services giant, says, "No one is excluded from the responsibility for innovation."

CIOs ON THE RISE

More heads of IT hold the CIO title than ever before:

60%
this year, compared to
50%
last year

And Please Stop Talking About ROI

This one's easy. If what you're doing as a CIO takes the company, business unit, department, group, system and/or application two steps back, please stop. Now.

In this flinty economic climate, with an average tenure of 4.4 years in your current job (See "All That Data: All About You," Page 77), there's no more waiting for ROI. Woe to the six IT leaders in our survey who told us that they did not know who was accountable for IT ROI.

Guys, you might reexamine the color of your parachutes.

The CIO's Time to Strut

A strong, balanced, successful CIO doesn't heed pundits and he doesn't pay attention to buzzwords. Strong CIOs don't align technology and business. They work with their peers. They guide them, educate them, persuade them, debate them, hear them, help them, decide with them and execute the

enterprise's strategy with them.

Strong CIOs don't innovate. They figure out ways to make money for the business. They cut waste and plow those savings into projects that create value. Sometimes they create whole businesses where none before existed.

Strong CIOs don't cast about for ROI. They avoid paths that don't promise it.

Sound cocky? Maybe. But there's no time left for IT leaders who don't understand all this, says Jan Bertsch, CIO of \$62 billion Chrysler.

"Great execution is expected. That's the floor," Bertsch says.

Besides, many CIOs have earned the right to strut. This year's "State of the CIO" survey finds CIOs gaining ground. More heads of IT hold the CIO title than ever before: 60 percent this year, compared to 50 percent last year. CIOs are also making more money, too, with \$237,360 the average annual compensation for respondents, jumping 28 percent from last year's \$185,240.

The average CIO in our survey rose through the IT ranks. At age 47, he (and 86 percent of the time he is a he) controls a centralized IT department with a staff of 188 and a budget of \$57.8 million.

More CIOs report to the CEO (41 percent) than to any other position. That statistic has held fast three years running and is important because that relationship is a good predictor of a CIO's success or failure. For example, Slade Gorton, a private, family-owned seafood wholesaler in Boston, recently installed Kim Gorton as president, replacing Wally Stevens, who retired after 15 years in the position. Bonnie Hardy, Slade Gorton's CIO for the past seven years, says a CIO shouldn't be kept at arm's length from senior leaders in other departments. "CIOs need to discuss business strategies and goals with them, not hear them 'third hand.'" Hardy meets with Gorton monthly and that, she says, "makes me more effective because I'm understanding needs directly."

The shift Hardy is experiencing now is



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ITIL ■ Integrating IT To Drive Business Value

ITIL—the Information Technology Infrastructure Library—is the de facto standard for IT service management and delivery. However, few organizations are currently equipped to capitalize on all that ITIL offers. The problem is twofold: Organizations need to better understand their current practices, and they must analyze where they can gain the greatest IT value. Only then can they develop the right roadmap to achieve long-term success.

Everyone accepts that best practices can offer a path through the quagmire of rising IT costs. Today, best practices such as ITIL and ISO 20000, which was inspired by ITIL, offer an enticing vision: a rational, comprehensive means for defining and delivering standardized IT services. But in practice, the vision often falls short: Many organizations are only able to partially implement these frameworks because they do not really understand their IT assets in the first place, and because they misunderstand or underestimate the challenges they face. However, by applying the right tools and methods needed to develop that understanding—a precondition for success—organizations can effectively implement ITIL-based initiatives to drive greater business value from their IT infrastructure.

ITIL: The Concept and the Reality
According to industry studies, 70

to 75 percent of annual IT spending simply sustains existing infrastructure and practices. That leaves a huge innovation gap between business strategy, goals and needs, and what's actually happening in IT. In effect, the past has a stranglehold on the organization, trapping it in a vicious circle of responding only to existing needs. This not only increases costs, but also inhibits the organization from implementing innovations that could ultimately drive down costs and enhance service quality.

There are options. ITIL has earned a place of respect and importance around the globe. Since its original development by the United Kingdom Central Computer and Telecommunications Agency in the 1980s as an effort to bring some order to chaotic and expensive public-sector information technology projects, ITIL has gone through a number of iterations and has expanded to become a core

best-practices model for the whole technology industry. Indeed, ITIL inspired and influenced the creation of the ISO 20000 standard for delivery of services.

Fundamentally, ITIL aims to better align IT activities and spending with the goals, directions and processes of the organization as a whole. In particular, it focuses on the requirements of users rather than on the technology itself. Moreover, it aims to establish the means for ongoing, continual improvement.

ITIL v2 is organized into 11 key process areas. Five fall under the category of Service Support plus the Service Desk (a function). Those process areas include:

- Incident Management
- Problem Management
- Configuration Management
- Change Management
- Release Management

The remaining six reside within the Service Delivery category. These process areas include:

- Service Level Management
- Capacity Management
- Availability Management
- Financial Management
- IT Continuity Management
- Security Management

While these 11 process areas offer a comprehensive and broad framework for organizational improvement, few organizations manage to successfully implement them all. Part of the problem is that, as with ITIL as a whole, much is open to interpretation. Thus, it is all too easy for those attempting a first-time ITIL implementation to simply miss the boat. Just as important, organizations may lack the discipline, knowledge and experience needed to balance efforts appropriately among the 11 different process areas. In other words, ITIL describes what best practices are but not how to implement them. The real business value derived from ITIL comes when an organization develops an actionable roadmap for continuous process improvement based on ITIL best practices.

ITIL, in short, provides a framework for IT service management. ISO 20000, by contrast, offers an independent standard suitable for third-party certification. Where ITIL is vague, ISO 20000, which is complementary to ITIL, is specific, defining in detail the requirements and standards needed to deliver acceptable-quality managed services, including benchmarks. While ITIL supports IT service delivery through the certification of personnel, ISO 20000 enhances the effectiveness

of daily support for IT services through the systemization and certification of processes.

Applying ITIL in Your Organization

To achieve success with ITIL or, indeed, with any new IT or business initiative, it is critical to become familiar with all aspects of the organization and how it functions. There is no "right way" or a single blueprint. An understanding of

people, processes and priorities must drive the approach. In particular, it is important to:

- Determine what the IT organization looks like at a high level. Start with an infrastructure maturity assessment to gauge your IT maturity.
- View the business organization from an IT perspective.
- Take a census of the services being offered.
- Develop an understanding of

A Proven Resource for Driving Business Value

While it is true that there is no single path and no single best way to implement ITIL, ISO 20000 or any other approach to best practices, organizations dramatically increase their likelihood of success when they leverage the discipline, knowledge and experience of an outside partner.

CompuCom delivers that discipline, knowledge and experience along with specific action plans through its Integrated Infrastructure Management (IIM) solution, to provide a compelling roadmap for best-practices implementation. With 20 years of experience and \$1.6 billion in revenues, CompuCom is recognized as a leading IT outsourcing company providing infrastructure management services, application services, systems integration and consulting services, as well as the procurement and management of hardware and software. CompuCom employs more than 7,700 highly skilled associates who together have earned more than 42,000 industry certifications, including ITIL

certifications, company-wide.

Since 1987, CompuCom has received recognition for providing leading IT services quality by two of the top industry analyst firms. It has worked with a wide range of Fortune 500 clients in diverse engagements across the United States and Canada to build a substantial and proven track record.

CompuCom maintains strategic alliances with the leading hardware and software manufacturers. It is one of 12 companies in the United States to achieve Microsoft Gold Certification for Enterprise and Security, as well as one of six to win the Microsoft Vendor Program Excellence Award. CompuCom attained status as a Cisco Gold partner, and in 2007 achieved SCP Certification for the ninth straight year, becoming the first company to earn this certification for nine consecutive years.

For more information on CompuCom's IIM solution and to read case studies related to client engagements, visit www.CompuCom.com.

how mature those services are.

- Understand the strengths and weaknesses of those services.
- Assess the formal processes that support service delivery.

To further ensure the success of an ITIL initiative:

- Identify areas where help may be needed—especially in areas such as organizational change leadership.
- Consider seeking guidance and expertise from organizations that are experienced in implementing ITIL processes.
- If working with an outside organization, be sure it has demonstrated a strong proficiency in program and project management.
- Consider the advantages of working with an outside organization that is ISO 20000-registered.

The Role of Integrated Infrastructure Management (IIM)

After gaining a better idea of where your organization is on its road to ITIL, the process of further assessment can begin, including the development of a roadmap of where to go next and how to get there. One effective way to accomplish these goals and develop a specific action plan is CompuCom's Integrated Infrastructure Management™ (IIM) solution.

Although it has been widely acknowledged for more than a decade that the fundamental challenge for IT organizations is to control costs while improving alignment with business objectives, results have usually fallen short. Indeed, more often than not, costs continue to rise as businesses wrestle internally with growing complexity

and externally with threats such as viruses and malware. The challenge is, whenever possible, to drive costs out and enhance service levels while boosting the availability and productivity of systems and people.

The road to process and infrastructure maturity is not an easy one. If it were, then there would have been a marked change in organizational maturity since a leading analyst firm first created its maturity index back in 1995. One leading analyst firm's study showed that the majority of organizations (80 to 85 percent) were ranked an average of a 1.4 on a 5-point scale. Sadly, a dozen years later, not much significant movement has taken place.

CompuCom's Infrastructure Maturity Assessment Tool (IMAT) is an integral component of IIM, and can pave the way for ITIL-based implementations by assessing the maturity of an organization's IT infrastructure as a first step toward ensuring maximum integration and achieving the greatest value from IT services, hardware and software.

IIM is not a group of disparate functions. It is a systematic approach that takes a holistic view of the organization—from acquisition to disposal, from the fundamentals of the operating system to the enterprise applications running the business. IIM helps organizations focus on building a tightly integrated infrastructure that delivers effective IT asset management, builds an efficient service delivery mechanism, and assures the highest level of service quality at the lowest possible cost.

IIM can help organizations

forge a tightly integrated infrastructure combining multiple benefits such as:

- Effective IT asset management life cycle
- Efficient service delivery processes
- A cost-effective service desk
- Uncompromised service quality
- Increased productivity
- Improved end-user satisfaction
- Reduction in support costs for clients that can range from 20 percent to as much as 50 percent

CompuCom's IIM solution is logical, process-oriented and transparent. It starts with a maturity assessment of the IT infrastructure. Subsequent steps include setting a baseline, validating data and defining a roadmap for driving greater business value from the IT infrastructure. Above all, CompuCom's IIM solution is about partnership. Working together with its clients, CompuCom delivers what the client needs—a flexible and agile infrastructure that delivers strong business value day after day.

Delivering on the Promise of ITIL and ISO 20000

IIM is not about imposing an outsider's vision on organizations. It is about empowering organizations to make the changes they really need, such as ITIL process integration, combined with CompuCom's IIM solution, through a strategic partnership. The partners each bring capabilities to the relationship that complement one another. The specific goals depend on the individual organization and its business needs.

For example, E. & J. Gallo Winery needed to increase IT service and quality levels and reduce the total cost of ownership. Gallo chose to partner with CompuCom to enhance the help desk function. Together, they leveraged CompuCom's IIM solution to design and expand the knowledge database and thereby enhance the effectiveness of the service desk agents. As a result, Gallo and CompuCom user satisfaction surveys now reflect high marks for service desk quality. Best of all, Gallo has been able to:

- Decrease the use of expensive, on-site problem resolution methods
- Improve the mean time to repair by 95 percent
- Reduce the total cost of ownership for Gallo's IT system by 45 percent

The end result is a highly efficient and effective IT environment that has reduced costs significantly without compromising client satisfaction and service quality.

CompuCom's approach to IIM can further facilitate the process of change through a structured approach and specific deliverables such as the utilization of the CompuCom IMAT evaluation process to better gauge the infrastructure maturity of the current environment.

CompuCom's IIM solution enables an organization to leverage best practices and proven processes to eliminate work and drive costs to the lowest possible levels, all while maintaining or increasing service quality. As the enterprise embraces the adoption of ITIL and partners with an ISO 20000-registered ser-

vice provider like CompuCom, it is important to understand what the changes will mean for the organization and its people, processes and technology. Organizationally, key business stakeholders must be involved to ensure that they buy into the solution and that it is aligned with business drivers and objectives.

It is also important to qualify the solution, ensuring it fulfills business

and IT requirements. Finally, metrics should be created to track performance over time.

Regardless of whether you are just starting your ITIL journey or your implementation is underway, look to a strategic partner that can help you develop a roadmap to continuous process improvement and enhanced business value from an integrated IT infrastructure. ■

Delivering a Roadmap for Continuous IT Improvement Through IMAT

CompuCom's Infrastructure Maturity Assessment Tool (IMAT) is a comprehensive evaluation tool that can help organizations quickly grasp the state of their IT infrastructure. The results expose areas of opportunity that, when adopted, can improve maturity, reduce cycle times, and increase operational efficiencies that translate into cost reductions and enhanced service quality. IMAT is built on CompuCom's two decades of experience, and reinforced by benchmarking data and industry best practices.

IMAT is aligned with industry-standard methodologies including ITIL and Capability Maturity Model (CMM). Unlike other evaluations, it provides a comprehensive assessment of IT operations by comparing 21 best-practice areas and aligning the results with a leading analyst firm's benchmarking database, comparing them against peer group information, complexity of services and the number of seats under management.

Further distinguishing the CompuCom Infrastructure Maturity Assessment Tool is the inclusion of an improvement roadmap that puts

companies on the path to predictive operations and helps them focus on the IT efforts that will deliver the highest business value.

Once consensus is gained with the client, CompuCom can move to the next phase: delivering a total cost of ownership (TCO) assessment. Here, direct and indirect cost data are gathered on assets, services and labor factors. The results are then compared to an independent benchmark database of the client's industry peer group based on complexity as well as size and scope of functions.

The final report shows the TCO of the environment. This data, combined with an actionable roadmap, becomes the benchmark for continuous improvement. The tool can be used annually thereafter to determine improvement and cost reductions over time.

Organizations that adopt the IMAT recommendations can expect infrastructure support savings from 20 to as much as 50 percent over time as they move down their path and up the maturity continuum toward a fully optimized state.

The Big Picture

Kurt Hamm

FUNCTION HEAD CIO

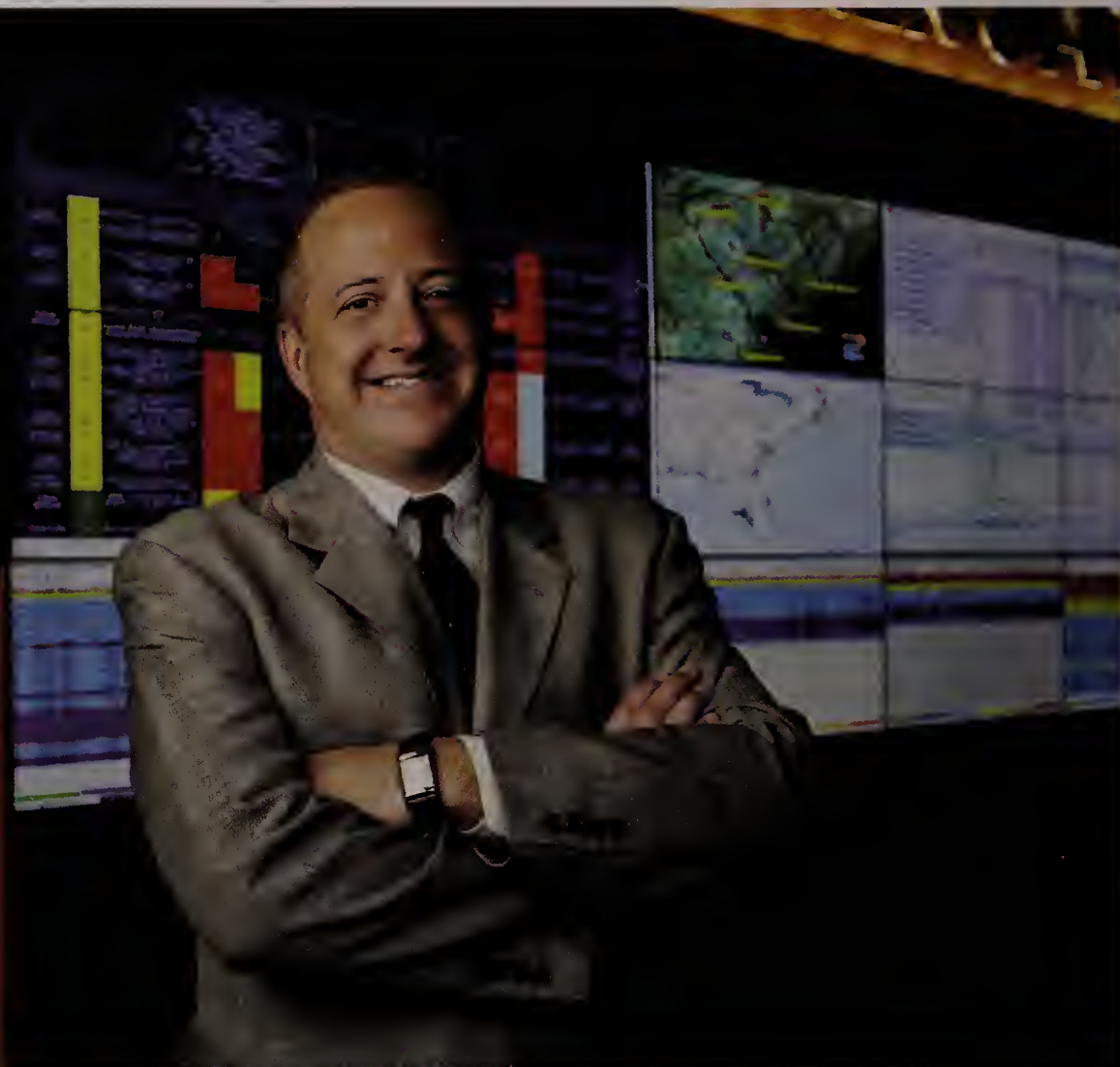
TITLE Director of IT at \$11.8 billion Time Warner Cable, nation's second-largest cable operator

CV 2.5 years as Director of IT; previously, VP of Technical Services for US Xpress, a transportation services company

REPORTS TO
VP of Engineering

KEY PROJECTS Within customer care center, deployed a converged data and voice infrastructure that provides flexibility and reduced costs.... Architecture includes a VoIP platform that allows rerouting calls quickly within the center as well as shifting call volume to other centers.... To support employees working in technical operations, deployed laptops and handheld devices to provide real-time work scheduling and routing.

HAMM ON VENDORS "I look for vendors that demonstrate a willingness to look beyond the current deal on the table. When there's money on the table or a technical issue to be resolved, it becomes very apparent which vendors are committed to a real partnership." —C.G.L.



being replicated across industries, across the entire business landscape, as CIOs are beginning to work for a new generation of CEOs who grew up with technology, says Jim Noble, president of the Society for Information Management (SIM), a professional group for both CIOs and those who aspire to be CIOs. That's a big plus, says Noble, "when the CIO is trying to sell ideas."

Jeff Loeb agrees. Loeb became a first-time CIO last March, at Wilsons The Leather Experts, a \$321 million retailer. Loeb plans to roll out a new point-of-sale system and experiment with systems to measure customer traffic and sales conversion in the stores, and he's being supported by his CEO. In turn, Loeb aims to improve his department's credibility and execution by making sure IT projects stick to budgets and timetables.

"It's important to have the CEO understand what you do," Loeb says. "And to show him it works."

So, What Kind of CIO Are You?

There isn't just one way to be a CIO, or one set of CIO concerns. Based on answers to questions about how you spend your time, we've classified our respondents as leaders in these areas: function head, transformational or business strategy.

A function head CIO primarily concerns himself with fireproofing the IT house so that he doesn't waste company time and money keeping the infrastructure humming. When asked to choose activities describing how they spend most of their time, 57 percent of those CIOs we identify as function heads said they focus on improving IT operations.

Raj Datt, VP and CIO at Kennametal, for example, could be described as a function head CIO. He recently installed real-time application and network monitoring systems to strengthen his IT infrastructure. (See his profile on Page 46.) Datt is also among the 41 percent of CIO function



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The Big Picture

Dina Stewart

FUNCTION HEAD CIO

TITLE Corporate IT Director,
DeCrane Aerospace

CV Two years at DeCrane; previously business system analyst at LSI Logic for six years

REPORTS TO Vice President
and Corporate Controller

KEY TECHNOLOGIES

Virtualization has allowed Stewart to eliminate approximately 25 of 95 servers.... Recently upgraded a LAN infrastructure to PoE gigabit switches, allowing IT to be "proactive rather than reactive" when it comes to responding to network issues.... Also moved to VoIP to connect DeCrane's 11 facilities, providing better communications and integrating customer service.

STEWART ON VENDORS

"It's good when [vendors] involve experts early in the process. I like to work with salespeople who aren't afraid to bring in systems engineers that are specialists in certain areas."

—C.G.L.



heads who said a critical part of their work is developing IT talent. That is, cultivating new fireproofers. Smart.

A transformational CIO is someone who, like Loeb at Wilsons, leads change efforts and redesigns business processes. According to our survey, transformational-type CIOs support the greatest number of users, 7,600 on average, and command the biggest budgets, at \$70.7

million, and technology staffs, at 219. After all, it takes money and people to make change.

A business strategist CIO, such as Deirdre Woods, CIO and associate dean at The Wharton School at the University of Pennsylvania, focuses on and frequently interacts with external academic customers and has developed IT-enabled business systems to reach out to them. Woods has been building Web applications that simulate business scenarios so Wharton

students can practice making decisions. (See Woods's profile on Page 58.) Business strategist CIOs, according to our survey, are the rarest birds and are compensated accordingly: \$303,000, on average.

It's important to note that being one sort of CIO isn't necessarily better than being another, unless you're not what your company needs or wants.

Put a business strategist at the IT helm of a manufacturer where the ERP system is going south or the wireless WAN in

Security & Privacy Services

Making risk intelligent decisions to manage today's identity crisis

Today's reality is that identity and access management is a highly complex business issue that goes far beyond the IT department. It encompasses the entire enterprise, including business units, locations, systems, access points, business associates and customers. The growing number of mobile employees, joint ventures, and other business activities that expose your IT systems to potential threats complicates matters.

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- Strong authentication
- Federated identity

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The Big Picture



Deirdre Woods

BUSINESS STRATEGIST CIO

TITLE Associate Dean and CIO, Wharton School, University of Pennsylvania

CV 20 years at Wharton; 3.5 years as CIO; previously senior director in computing group

REPORTS TO Deputy Dean (senior academic officer) and Senior Associate Dean (senior administrative officer)

KEY EFFORT Building rich Internet applications to help students practice real-time business scenarios.... These simulations mimic real business world scenarios.... "When you make decisions under uncertainty, it helps for real life," Woods says. After the simulation, professors are given rich data sets with graphics to demonstrate decision complexities.

WOODS ON CUSTOMER FOCUS Says to listen to users when devising new applications or systems. With the simulations, her IT team did extensive research with faculty. A student technology board advises her about implementation for student applications.

"I always say if you build it, they won't come. They are the idea authors, and what we do is turn their great ideas into great code."

—C.G.L.

Shanghai keeps crashing and you'll see a lot of frustration. Heads-down technology work isn't a strength of the business strategist CIO, nor usually is it what he wants to do with his time. For that you need a function head CIO.

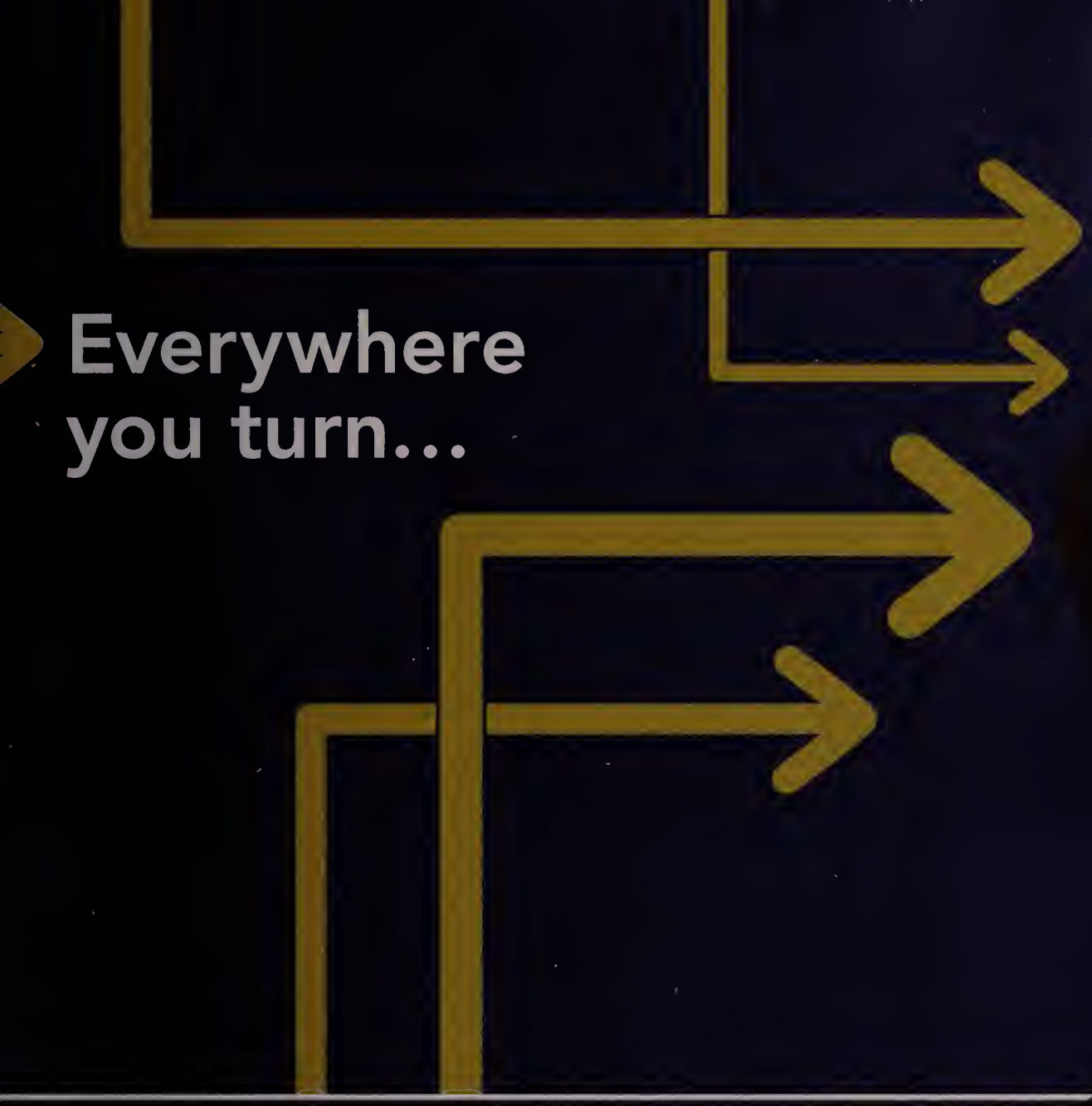
But don't call on a CIO who likes to roll up his sleeves and get down and dirty with code when the enterprise needs to convince a business unit to give up the shadow IT project it's running for the greater good. Instead, call on a trans-

formational CIO experienced in leading change and making it stick.

No CIO is all one thing or another. All CIOs fall somewhere on a spectrum. To see where you fit in, go to http://quizzes.cio.com/impact_quiz/ to take a quiz developed by the CIO Executive Council, a professional group founded by readers of *CIO*, which created the classifications in cooperation with executive search company Egon Zehnder International.

Charged with instigating and execut-

ing big corporate changes, transformational CIOs work under the glare of the corporate spotlight. Knowing when to emphasize which skill requires a CIO to understand "the maturity of your business," says Mitchell Habib, executive vice president of global business services at The Nielsen Co., a \$2.5 billion information and media company based in New



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The Big Picture

York and the Netherlands.

Habib is known among executive recruiters as a transformational CIO, having helped companies such as General Electric and Citigroup blaze through organizational change.

Nielsen, which provides the famous TV show ratings as well as other media metrics, hired Habib in March 2007 to reconfigure how it manages technology. He's introducing new software platforms and, in a \$1.2 billion deal with Tata Consultancy Services, is outsourcing some IT infrastructure as well as some financial and human resources processes on a global scale. In the process, he's changing the lives of his 4,500 IT staff members.

The understanding Habib talks about—knowing the potential leverage of technology—not only can elude some CIOs but it can also escape their peers in senior management, says SIM president Noble, who has been CIO at Altria and AOL Time Warner. “My worry is the board of directors, which is setting direction for the company but doesn't know where they are [terms of] IT sophistication,” Noble says.

CIOs can bewail their fate, forced to answer to an uninformed board. Or they can change that.

CIO Challenges and Opportunities

To educate the board as well as internal managers, sometimes CIOs must market IT's accomplishments. Timidity gets you nowhere and our survey respondents offered specifics about where they made the biggest impact in the past year. At 70 percent, accounting and finance is the most frequently cited business process undergoing improvement by IT. That's followed by customer service at 68 percent and human resources at 54 percent.

Forty-two percent of respondents reported that IT is improving the supply chain and logistics process. That's a big jump over the 27 percent in last year's study and it is the area showing the biggest rejiggering of priorities. This

is not surprising. As the globalization of business picks up steam, supply chain issues have multiplied and intensified for manufacturers, retailers, transportation and warehousing companies. Not coincidentally, recalls of everything from cantaloupes to kids' toys have forced companies to make millions in unplanned investments trying to collect bad products. (For more on the role supply chains play in recalls, go to “Beyond Peter Pan” at www.cio.com/article/148054.)

GLOBALIZATION WORRIES RISE

CIOs trying to improve supply chain processes with IT:

42%

this year, compared to

27%

last year

Another emerging challenge (and perhaps an opportunity) for CIOs is managing “shadow IT” in the enterprise. Addressing this issue was a priority for the technology group at Southern Co., a \$14 billion electricity utility. Becky Blalock, Southern's transformational CIO for the past five years, had to convince the customer service department to relinquish a financial application it had built itself.

It was the largest application in the company not managed by IT, Blalock says.

Last Year's CIO Today

To do your own trending on the **STATE OF THE CIO**, see last year's survey at www.cio.com/state-of-the-cio/2007/index.

CIO.com

When Southern reorganized customer service, Blalock took over the software development that group had historically done. But to cement the deal, she had to demonstrate that her group could manage the application better, costing the business unit less than it had been spending. “You can't just say, ‘No, you can't do this,’” Blalock says. “We made a concerted effort to work with them and demonstrated we could save them money.”

You May Be in the Right Place at the Wrong Time

As often as CIOs have been told they must speak the language of business, and as much as being able to do so helped Blalock, CIOs gain or lose power based on their deeds, not their words, says Eric Sigurdson, who leads the information officers practice at recruiter Russell Reynolds. For example, CIOs can influence their place on the function head-transformational-strategist spectrum by learning different skills and shifting the way they spend their work hours to emphasize different activities. Forget alignment. Understand who wants what from you when and then do it. Forget innovation. Get out and free up money for reinvestment. Forget ROI. Make work easier or quicker for the people who use what you build.

But, Sigurdson says, more rides on whether you grew up in the same organization or moved among companies and cultures: “Outsiders coming into a company don't have allegiances built up over years or political ties. They can do whatever they think is right without having a fallout of old relationships.”

The takeaway is this: If the rest of your C-level peers don't view IT as integral, if they don't demand as much from you as they do from other C-level executives, find a new company with executives who do. They're out there. **CIO**

Senior Editor Kim S. Nash can be reached at knash@cio.com. Visit www.cio.com/special/slideshows/state_of_the_cio_2008/ for more on the “State of the CIO” survey.



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Collaborative Integration

Alcatel-Lucent's recent merger offers a valuable view into a successful network integration project

Elizabeth Hackenson, CIO, ALCATEL-LUCENT

She is responsible for managing the company's global information technology infrastructure and systems. Previously, she was the CIO of MCI.

John Meyer, PRESIDENT OF SERVICES, ALCATEL-LUCENT

He manages the company's portfolio of deployment, managed and professional services. Previously, he was president of Lucent's Global Sales and Services.

Companies today face ever-changing market conditions. CIOs must evaluate and introduce new services and capabilities to ensure that their organizations are well-equipped to respond to challenges while improving overall efficiency.

Alcatel-Lucent's Elizabeth Hackenson and John Meyer got together to discuss this environment and how they collaborate for successful network integration.

What business pressures do CIOs face today that require the need for business/IT transformation?

Hackenson: While CIOs face many pressures, two worth highlighting are deploying collaborative tools and leveraging technology as a competitive advantage.

To support collaborative tools, always-on applications and ecosystems, companies must migrate from multiple disaggregate networks—including voice, video and data—to an IP-based network. Once a blended communication network is in place, then new services and applications can be deployed.

Meyer: One of the challenges that we are seeing, especially with IP transformation, is the mission-critical role that the network plays in day-to-day business operations. CIOs must not only buy and integrate technology that supports these demanding business requirements, but they must also implement operations and support processes to ensure their all-IP network continuously meets the demands of the business. That's a huge change for CIOs today. And that's why it's important that Elizabeth and I work closely together; by sharing our expertise,

we have an advantage in being able to collaborate to overcome these challenges.

How can a network integrator help organizations address business/IT transformation?

Meyer: Network expertise is transforming and moving a little farther into the traditional IT space. When you look at moving to an all-IP network, is that transformation driven by the network operations organization or by the CIO? In most cases, these two functions must come together and be augmented by a network integrator whose specialized skills can help the organization obtain true business value from the transformation.

Hackenson: As a customer of John's, I rely on his team's vast network integration experience, especially as we move from three networks—voice, video and data—toward a global IP backbone. I can't afford to have the expertise on hand to manage those networks and the transformation required to consolidate them. The experience that John and his team bring is helping us launch innovative ideas and realize savings not just in the consolidation but also in how we implement it.

How did the Alcatel-Lucent merger enhance the combined company's strengths in network integration?

Hackenson: On Day 1 of the merger, Dec. 1, 2006, we had to take two very large global companies and merge them together seamlessly. To put things in perspective, we manage 10 million e-mails per day, 93,000 desktops/laptops, 24 data centers, 85,000 phones, 5,000 BlackBerry,

nine portals and more than 1,200 applications. Our initial approach was to integrate the two companies' networks, and now we are moving to a global IP backbone. It took a lot of behind-the-scenes work and planning, but it was vital to the start of the new company.

Meyer: When you create one company out of two and create one IT infrastructure out of two—or, for that matter, when you embark on any major project—you're faced with a bubble of resource needs. In our integration business, we have more than 22,000 people in 130 countries. So when a multinational comes to us and says, "We want to run this as one network," we make that happen no matter where they are, tapping into that expertise. We operate, manage and monitor over 60 networks with 80,000 subscribers for our customers. We have relationships with over 300 vendors supporting over 1,700 products. These are real strengths when it comes to our network expertise.

FOR MORE INFORMATION:

Check out the case study, "Transpower: Transforming Electricity Operations," which describes a successful network integration. It can be downloaded at www.cio.com/whitepapers/alcatel-lucent

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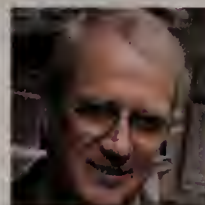
Your **CUSTOMER,** *Your* **FUTURE**

For CIOs to truly become businesspeople,
they need to start thinking about—
and organizing IT for—
their business's customers

BY CINDY WAXER

LET'S FACE IT: The work of making the customer happy rarely tops an IT professional's to-do list. Unlike slashing costs, boosting revenue or pushing the envelope on innovation, increasing customer satisfaction simply (and unfortunately) doesn't fall under the umbrella of buzz-worthy IT undertakings. No wonder then that only 10 percent

of this year's "State of the CIO" survey respondents consider external customer focus to be an executive leadership competency most critical to their role as CIO. Add to that the fact that respondents say they spend a mere 9.4 percent



Reader ROI

- :: Why customer focus means IT reorganization
- :: How to engage with the customer
- :: What IT attitudes need to change

Customer Focus



Pacific Gas & Electric CIO **PATRICIA LAWICKI** says the success of customer-focused initiatives hinges on "sitting down with all the lines of business."

of their time interacting with external business partners and customers and you get—yes—a customer focus gap.

"Many CIOs are a little cavalier about making raising customer satisfaction an explicit goal," says Harley Manning, vice president and director of Forrester Research's customer experience group. Rather, he says, objectives such as cost avoidance and innovation are far more

likely to receive top billing on a CIO's project roster. That's because not only is bolstering customer loyalty a hard sell among corporate bean counters, its (arguably) intangible benefits and its (allegedly) nebulous returns often make it a thankless job. After all, when it comes to customer feedback, CIOs typically hear one of two things: harsh criticism or the sound of one hand clapping.

But despite this history of practical difficulties and emotional disincentives, some of today's top CIOs are making customer satisfaction a priority—and are reaping huge rewards as a result. They're discovering that focusing on the customer can yield substantial benefits, including (but not limited to) saving money, and increasing sales and enhancing productivity—as well as keeping the customer satisfied.



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Customer Focus

In fact, by tackling customer-centric IT projects, CIOs can reshape their role as key corporate players and position themselves for greater enterprise responsibility by aligning with the major concerns of their executive peers and bosses.

Business, after all, is all about serving the customer. If you want to be part of the business (and you do, don't you?), you want to be a part of that.

Customer Focus Means Organizational Change

Patricia Lawicki lights up when discussing her customer-centric IT initiatives. As CIO of Pacific Gas and Electric Company, a \$12.5 billion San Francisco-based utility, Lawicki serves 15 million customers scattered across two-thirds of California. Among them are Silicon Valley behemoths such as Hewlett-Packard, Sun Microsystems, Oracle and Cisco. So when the California energy crisis, the Enron debacle and an executive staff overhaul in 2005 threatened to permanently tarnish PG&E's reputation with its custom-

"You need to transition people as gracefully as possible to a new system."

—COLUMBIA BUSINESS SCHOOL
CIO LEONARD PETERS

ers, Lawicki began working on a series of customer-focused projects.

The centerpiece of her efforts was PG&E's SmartMeter program, which provides customers with an automated gas and electric metering system allowing PG&E to collect data without setting foot on a customer's property. Electric meter data travels along a system of power lines to a PG&E data center for processing, while gas meters rely on radio frequency transmitters to deliver data back to the company via a public wireless network. Once a SmartMeter system is up and

running, PG&E can collect energy usage information regularly and pinpoint power outages as they occur. Future plans include allowing customers to access their usage data online, and the information is

broken down so they can better manage their energy consumption and expenses. For example, a homeowner may discover that running the dishwasher every day at 4 p.m. is 20 percent more expensive than

3 TIPS FOR CUSTOMER-FACING SUCCESS

1 Talk to the Users

Develop a customer-focused project in a vacuum and you'll end up being the only one who likes it. The counsel of third-party providers and your customers is essential.

"Hire a project manager who knows your customers' line of business," says Adirondack Medical Center CIO Mike Kelly. "Involve your customers from day one. Let them know that this is their project, not yours. Provide all the support they need."

Pacific Gas and Electric CIO Patricia Lawicki is quick to agree. The success of her automated gas and electric metering systems hinged, she says, on taking "a holistic approach" by "sitting down with all of the lines of business and instilling the concept that the sum of the parts is greater than any individual project."

2 Focus on the ROI

Convincing corporate bean counters that a customer-centric project is worthy of a sizable investment is often a hard sell. That's why it's crucial that IT project evangelists convert intangible benefits such as increased customer satisfaction into hard ROI figures that will pry open a corporation's coffers. Says Harley Manning, vice

president and director of Forrester Research's customer experience group, "My first piece of advice would be start with the hard metrics. And when all you have is soft metrics, take the time to make the connection to a hard metric." For example, try translating customer satisfaction into measurable variables such as customer retention, increased revenue per transaction and lower customer support cost.

3 Be Patient

If you're expecting customers to fall madly in love with your creation the moment it goes live, you're likely to be disappointed.

"You need to transition people as gracefully as possible to a new system," says Leonard Peters, associate dean and CIO at Columbia Business School in New York. So when Peters introduced faculty and students to a new course management system, he made certain to offer targeted and customized training. Training opportunities ran the gamut from classroom sessions and one-on-one consultations to student forums and lunch-and-learn programs.

Change is hard and people don't like it, even when the change is for the better. Give your customers time to get used to it.

—C.W.



A Highly Competitive IT Industry

Looks Forward to Serve Local and Foreign Clients

The last five years have seen the IT Industry of Pakistan develop into a formidable force. With one of the fastest growing economies, Pakistan is emerging as a powerhouse of economic expansion in the region. This has resulted in motivating both the local and the foreign businesses to secure their place in the economy that is on the verge of explosive growth.

The IT industry of Pakistan presents tremendous growth and investment opportunities. The competitive advantage in Pakistan is the most compelling of any country and includes a large pool of English speaking technical talent, quality certified technology companies, and a highly supportive government.

Over 400,000 personnel graduate in Pakistan annually, which include 20,000 with IT related degrees. Over 110,000 IT graduates are employed in the country. With a 15% annual increase in enrolment, several fold increase in higher education spending, and planned establishment of nine world class international universities, the supply of quality manpower is projected to grow rapidly in the future. A number of government training and internship programs add to the higher education regime.

Of 1,082 active IT companies in Pakistan, some 110 are certified International Standards Organization (ISO) - one of the highest numbers in the world. Scores of companies are also undergoing CMMi appraisal with the assistance of government programs.

The Government of Pakistan has allowed 100% equity ownership and 100% repatriation of profits to foreign investors. Major tax incentives such as tax exemption for companies have been allowed till 2016. Annual growth of IT exports has averaged 50% over the last four years, displaying a five fold increase. IT exports totaled \$1.4 billion in fiscal 2006-

07, including sales to multi-national companies, earnings of overseas offices of Pakistani companies, and salaries of non-immigrant IT workers abroad.

Pakistan is emerging as a location of choice for the outsourced software development and IT enabled services such as call centres and medical transcription. Several multi-nationals have located development and support centres here while others outsource work to Pakistani companies. Services companies in Pakistan have acquired business from leading corporations of the world such as GE, Citi Corp, Bank of America, and Google due to the high quality coupled with lower attrition rates. Companies such

as IBM, Bearingpoint and NCR have established their own development centres. TRG, an IT-enabled services company has acquired companies with revenue of over \$175 million in the United States. TouchstoneBPO has certified USA mortgage loan officers that handle customers directly from the US. PostAmazers,

Pakistan's largest animation and post production studio, has animated major Hollywood movies. Two Pakistani services companies, NetSol and Averox are now listed on NASDAQ.

Ultimus is a local business process management company with 1,600 customers worldwide including Microsoft and the White House. NetSol's car leasing

product has one of the fastest growing customer base that includes leading European and Asian car manufacturers. System's Mortgage Lien Processing product has twelve percent of the US market. Pakistani companies have acquired financing from Silicon Valley Venture Capital (VC)

Funds and now the Ministry of IT and Pakistan Software Export Board (PSEB) are also facilitating Venture Capital areas in Pakistan.

Pakistan has an edge over the neighbouring global giants in terms of its thriving Business Process Outsourcing (BPO) industry. The ready availability of skilled professionals, an appropriate IT infrastructure, and affordable rates for connectivity result in considerable time and cost savings for entrepreneurs.

The government body mandated to promote the IT industry is the Pakistan Software Export Board (PSEB), of the Ministry of IT which administers programs in the areas of human capital and

company capability development, IT Park development, international marketing, Industry research, public policy, and facilitation. PSEB facilitates several Software Technology Parks (STPs) with high bandwidth connectivity, electricity backups, and relatively lower rents. It

also has an ambitious program to build additional IT parks nationwide. PSEB also subsidizes attendance in international tradeshows and operates a high visibility website which serves as a portal for potential customers, investors and IT companies.

Competing on a worldwide scale, Pakistan's IT Industry has achieved phenomenal growth in IT exports in the last few years. With the fast-paced industry growth rate and the government's investor friendly policies, Pakistan has become a major player in the global IT industry.

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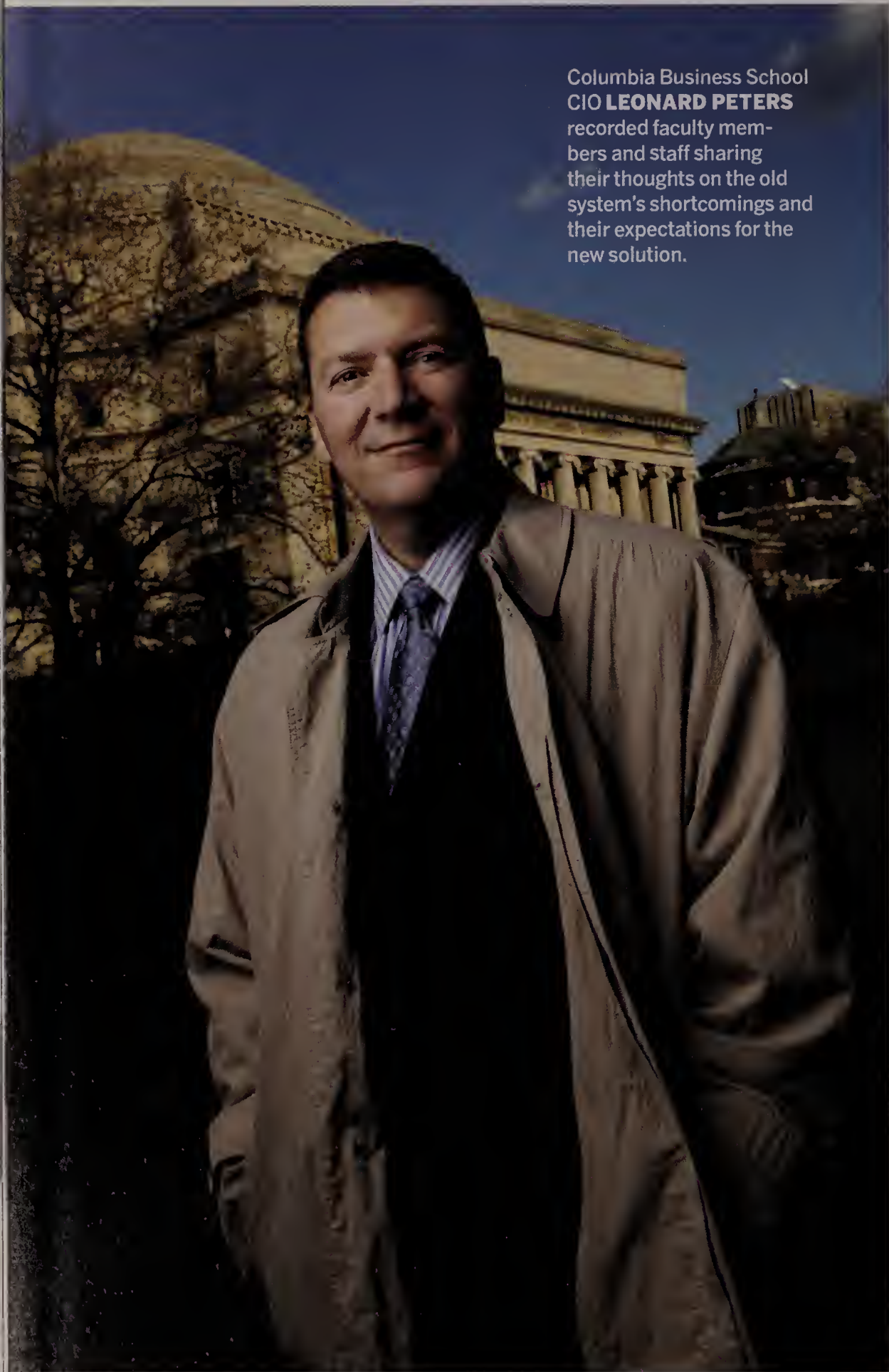
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Customer Focus



Columbia Business School
CIO LEONARD PETERS
recorded faculty members and staff sharing their thoughts on the old system's shortcomings and their expectations for the new solution.

waiting until midnight. "The SmartMeter project is geared toward letting our customers have more control over their energy consumption while helping them save money in the process," says Lawicki.

By end of 2008, it's expected that 1.6 million new meters will be installed across northern and central California, and within the next three years, PG&E wants to have the SmartMeter program

up and running in nearly 6 million homes and businesses.

But as the utility company provides customers with real-time insight into energy consumption, saving customers cash and the hassle of having to call PG&E to report outages seems like a no-brainer. Lawicki says that launching customer-focused initiatives (including a service that allows building developers to apply for new gas or electric service connections online) wasn't as simple as flicking a switch; it called for a complete overhaul of the company's IT organization in order to enable it to function as a single, centralized entity.

The first step was creating a Solution Delivery Center dedicated to the consistent delivery of IT solutions. This group of employees, including IT staff, the VP of marketing and subject matter experts from other lines of business, focuses on the skills needed to provide services and solutions to PG&E's business partners and customers. Prior to introducing the Solution Delivery Center, Lawicki says IT-related processes, such as providing Web-based customer support, depended on whichever PG&E department a customer was dealing with. By replacing a hodgepodge of departmental styles, approaches and systems with a body that ensures consistent, enterprisewide IT processes, PG&E cleared the way for undertakings such as the SmartMeter project.

The creation—and reexamination—of IT roles also readied PG&E for other customer-centric endeavors. A newly fashioned chief customer officer, responsible for all aspects of customer service at PG&E, works with the IT department to design customer-focused strategies and develop products around customers' needs. Even Lawicki had to step back and assess the part she was to play in the company's new approach to customer satisfaction. Upon careful consideration, she began to see her role at PG&E as *transformational* (for more on the different types of CIOs, see "The State of the CIO 2008," Page 40) and, drawing on her years of



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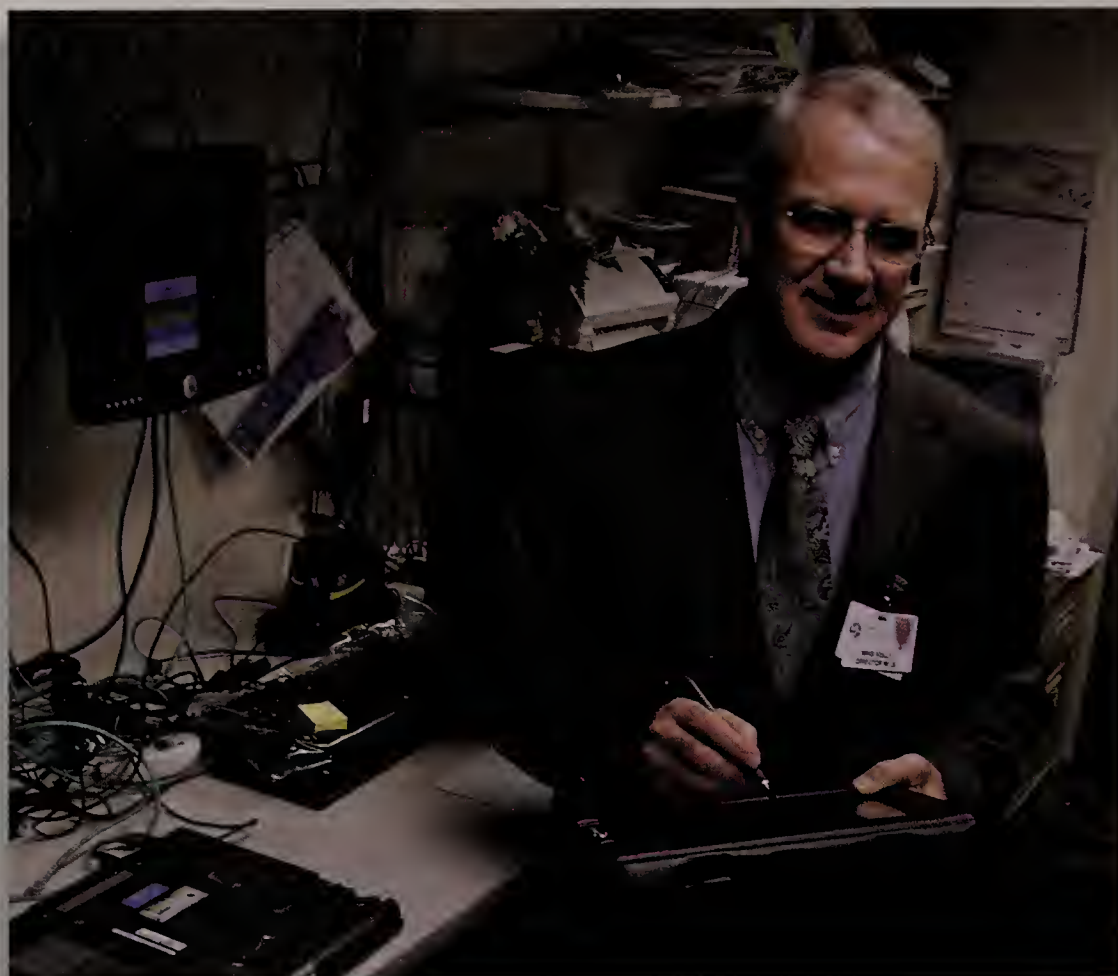
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Customer Focus



Adirondack Medical Center CIO

MIKE KELLY: "Our physicians viewed authentication, backup, permissions and access controls as nuisances designed to aggravate them and slow them down."

butes should be. He then used a videographer to record faculty members and staff sharing their thoughts on the antiquated system's shortcomings and their expectations for the new solution. Peters shot 28 hours of video—dubbed "Voice of the Customer Sessions"—and edited it into 40-minute segments, and then posted the segments on the business school's intranet as streaming media clips for all to see.

Because he engaged the school's customers (its faculty and students) in the system design process, Peters says, "people felt like we really got it; we really understood what the challenges were and where we needed to take the course management system. And that helped generate enormous credibility."

Peters's strategy of soliciting customer feedback in the design phase didn't end with the rollout. Currently, Peters performs weekly health checks of the system—the results of which are regularly communicated to faculty and students, along with notifications of system updates and modifications. There is also an advisory team that has constituents from around the community who are focused on the continued improvement of the environment. For example, some faculty members post quizzes on the system. Answers are hidden until a predetermined time and date, at which point they're automatically released for public viewing. An early, unintentional release of quiz answers, however, would be ruinous. So Peters performs regular checks to ensure that the system is configured properly, and to notify faculty members of upcoming content release dates.

"Probably one of the best things we do is the health checks," says Peters. "More than anything, it ensures quality."

In fact, by keeping faculty and staff informed of the course management

weathering mergers and acquisitions, started to analyze "the large amount of technology investment that was required" to revamp PG&E's approach—and her own—to her customer's satisfaction.

To Serve the Customer, Engage the Customer

Leonard Peters, associate dean and CIO at Columbia Business School in New York, knew it was time to replace his school's "antiquated and clunky" course management system when he began to receive "a ton" of complaints from faculty and students. So, in fall 2005, he began evaluating a number of vendors. After an in-depth review of courseware products, he chose Angel Learning. Deployed at the beginning of the summer 2007 semester, the Web-based e-learning solution lets students track upcoming and overdue assignments, send and receive e-mail, schedule events, check grades (if their professors use the site), participate in discussion groups and create teams for project work. It also allows faculty to administer pre-course work more easily and commu-

nicate requirements for multiple courses from a single, Web-based application.

But the intense competition among business schools for students and faculty meant Peters couldn't take any chances on the system's design and functionality. In addition to working with Angel Learning to customize it, in 2005 Peters partnered with both faculty and students in order to create a baseline of requirements. He cobbled together a group enrolled in the school's New Product Development course to determine what the system's key attri-

Involving faculty and students in the system design "helped generate enormous credibility."

—COLUMBIA BUSINESS SCHOOL
CIO LEONARD PETERS

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- Jeff Davis, Perficient President and COO

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Customer Focus

“Our physicians now understand that IT projects are very complex and very time-consuming and, as a result, they’ve become our biggest fans.”

—ADIRONDACK MEDICAL CENTER CIO MIKE KELLY

system’s technical glitches, modifications and latest capabilities, Peters has greatly reduced the number of help desk incident reports from 70 during the week of Sept. 17 to a mere 11 during the week of Oct. 8.

And, he says, the kids love it.

Unlike the User, the Customer Is Always Right

Adirondack Medical Center’s private practitioners didn’t just ask for a new electronic health records (EHR) system in early 2004, “they demanded it,” according to Mike Kelly, CIO of the \$80 million New York-based healthcare network. Composed of an acute care facility, two long-term care facilities and numerous outpatient facilities, AMC services 50 private practitioners who either care for patients or refer patients to the organization’s services.

One of the primary goals of AMC’s EHR system is to share patient information across New York’s 26 regional healthcare facilities in a secure, HIPAA-compliant manner. Electronic patient medical records may include reports on past diagnoses, surgical procedures, imaging studies, allergies, drug histories and laboratory test results. By providing doctors with greater access to this information, AMC’s goal is to ensure that physicians can provide patients with care appropriate to their conditions and that the delivery of this care is accurately recorded and preserved.

On this last issue, Kelly says, “Our physician community is justifiably concerned that in order to be paid for their services in the future, they’re going to have to provide greater documentation that they actually delivered the services that they claimed to provide.”

But while it was clearly time for AMC to graduate from its antiquated system of paper charts and place patients’ medical records on their physicians’ laptops and desktops, Kelly and his IT department knew the transition wouldn’t be easy. Although AMC’s physicians were “eager adopters of medical technology,” Kelly also was aware that his customers—those same physicians—were a notoriously demanding group and jealous of their time and that it would be a hard sell convincing them that enduring stringent HIPAA-mandated online security measures would be worth their trouble.

“Our physicians viewed authentication, backup, permissions and access control as nuisances designed to aggravate them and slow them down,” Kelly says.

Rather than fight a lonely, uphill battle, he developed a number of strategies to garner support. For starters, he held regular meetings with AMC’s medical staff to involve them in the decision-making process on everything from software and hardware purchases to ISP and networking selections. In this way, Kelly sought to reduce potential friction and encourage a sense of collective ownership of the project. Next, he hired a project manager with extensive physician office billing and management experience to lend expertise, credibility and an objective voice. Finally, the IT department held training classes for end users, including hospital spon-

sor meetings, at 7 a.m. or at 5:30 p.m. to accommodate the physicians’ schedules.

“Our physicians now understand that IT projects are very complex and very time-consuming,” Kelly reports, “and, as a result, they’ve become our biggest fans.”

For good reason: Since introducing the EHR system last year, some of AMC’s private practitioners reportedly have been able to treat an average of five additional patients a day—20 additional patients a week. By tracking patients’ visits electronically, AMC has managed to cut the time it takes many of its physicians to be reimbursed by 20 percent. And plans include building a patient portal (scheduled for a 2009 release) so that patients can take a more active role in their healthcare choices.

Making the Change

While no strategy—whether it’s getting ground-floor support, forging alliances or collecting feedback—can fully prepare a CIO for the rigors of a customer-focused IT undertaking or guarantee its ultimate success, understanding the nature of the beast can make a huge difference. AMC’s Kelly, for example, knew that physicians won’t stand for being dictated to. Columbia Business School’s Peters understood that implementing anything for a group of academics was as much about managing their expectations as it was about devising an implementation plan, no matter how sophisticated. IT accomplishments in higher education are often measured by alumni support and school spirit—customer satisfaction—not simply by dollars alone. “The returns we get are very different from a corporation,” Peters says.

In all cases, however, CIOs who are embarking on customer-facing projects need to remember something no businessperson ever forgets:

The customer is always right. **CIO**

Cindy Waxer is a frequent contributor to *CIO*. To read more about the State of the CIO, go to www.cio.com/special/slideshows/state_of_the_cio_2008/.

C-Level Competencies

Assess your strategic CIO impact; take the **PERFORMANCE QUIZ** at http://quizzes.cio.com/impact_quiz.

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WHEN INFORMATION AVAILABILITY MATTERS



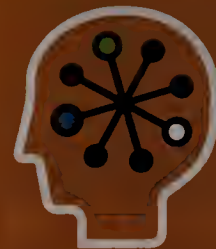
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TO SEE THE TOP SEVEN ROADBLOCKS COMPANIES FACE IN ACHIEVING INFORMATION AVAILABILITY AND FIND OUT HOW TO AVOID THEM VISIT WWW.AVAILABILITY.SUNGARD.COM/IA.



Remember the "What's My Line?" TV game show? It featured a panel that tried to identify the occupation (or "line of work") of the contestant. Imagine a CIO of twenty years ago appearing as the mystery contestant. Now, imagine modern-day CIOs on the panel trying to solve the mystery. Would they recognize their predecessors?

Within the answer lies the secret to a successful career today as a CIO. Let me tell

you why, and, along the way, leave you with a single tip, a best practice that I've observed becoming a habit for the most successful CIOs.

I first became familiar with the CIO profession while studying for my Masters degree in Chicago back in 1990. One professor was profiling cross-industry senior management positions and his description of the typical CIO stuck in my mind. He described an overworked and under-appreciated—dare I say—bureaucrat, with an average time on the job of two years. This person managed a cost center, so the greatest challenge was assembling the data to justify an annual budget increase. IT was viewed as a necessary evil, not as an opportunity. The shoulders of the CIO bore the burden of staffers down in the organization, those downtrodden IT technicians dispatched to an office to deal with a frustrated PC user. The IT organization could be either invisible—when everything worked properly—or an irritation—when systems malfunctioned. And unfortunately, too often this was the perception of the CIO in the eyes of senior management.

What a difference 17 years have made. Results from CIO Magazine's "The State of the CIO" survey reveal the complete transformation of this role. The highlights that stood out for me: 41% of CIOs report to the CEO, average time on the job is 4.5 years, and job satisfaction is up.

But here's the real breakthrough statistic: 89% of CIOs report that IT is either leading or co-leading business initiatives considered "innovations." It's therefore no surprise that the majority of CIOs believe the role of IT is to proactively envision business possibilities and initiate those ideas with technology. Therein lies your greatest opportunity. The CIO of 1990 was in no position to think or behave that way. Today's CIO has never been in a stronger position to drive business strategies forward. This is the new CIO.

Furthermore, CIOs are accepting this new mandate. The proof lies in another key survey finding. CIOs were asked to rank their IT management priorities, with everything potentially on the table, such as data privacy, controlling costs, developing staff and more. One priority rose to the top, way ahead of #2. The top priority: aligning IT and business goals.

The facts and figures tell only part of the story. Over the past year, my management team and I have been traveling the world, meeting face-to-face with hundreds of CIOs at gatherings in San Francisco, London, Toronto, Dallas, Mexico City, Barcelona, Tokyo, Brisbane, New York and more. These personal encounters have been validating and energizing. We see tremendous personal investment and optimism toward capitalizing on the mandate of the new CIO.

At HP Software, we share that optimism and have been acting on it through \$6.5 billion spent over the past two years acquiring breakthrough technology that only comes from market leaders. Our goal: equip the new CIO to (1) run IT more like a business and (2) strategically use IT investment to drive maximum business outcomes.

To those of you who share those goals, I have a tip for the future. Of all of these CIOs that we've spoken with, a few share a best practice that every CIO should know about. It's simple: make time for thinking big. The number one complaint of CIOs is the never-ending barrage of day-by-day demands, an inevitable part of the job. But don't let the tactical overshadow the strategic. The most successful CIOs literally schedule time—a day a month, an hour a week, perhaps a monthly lunch with key team members—to think big about the next stage of IT transformation and its impact on broader business goals.

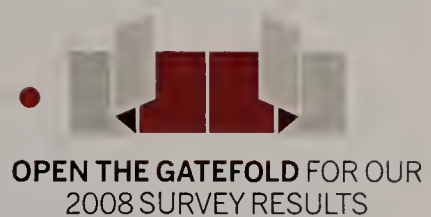
Wherever big thinking might take you in 2008, I wish you great success. To connect with my executive team and me, please visit: www.hp.com/go/hpsoftwarecio

Best regards,

Thomas E. Hogan
Senior Vice President
HP Software
Technology Solutions Group
Hewlett-Packard Company

Technology for better business outcomes.

The Survey



This year's "State of the CIO" survey reveals that CIOs are not all created equal. Depending on the type of CIO you are and the industry you're in, there are significant differences in everything from your salary and your budget to your priorities and your involvement in the business. Let's see how you—and the CIO role—are doing...





ALTERNATIVE THINKING ABOUT BUSINESS AND TECHNOLOGY:

A User's Guide.

Alternative thinking is recognizing that information technology is now business technology, and there's no going back.

It's realizing the proper role of technology in this era is not just to be safe and steady and reliable, but to spur the business to compete aggressively, imaginatively and daringly.

It's demanding that technology be judged not by arcane technical benchmarks, but by business metrics. (HP will help you meet them.)

It's working with HP to ignite innovation, demand simplicity, kill complexity and enforce efficiency to get to market before competitors even know what's coming.

Technology for better business outcomes. hp.com/alt





ALTERNATIVE THINKING ABOUT SOFTWARE:

Make Your Competition Call You Names (Like Omniscient).

Alternative thinking is designing software that makes your technology a slave to your business, not the other way around.

It's combining foresight, flexibility and control to encourage unyielding innovation and merciless productivity.

It's locking down requirements, testing ahead of time, monitoring after implementation and automating cumbersome processes (earning a few well-deserved pats on the back along the way).

It's demanding hard, cold business metrics and working with HP to reach them.

Technology for better business outcomes. hp.com/alt



All About You

Tenure Slips

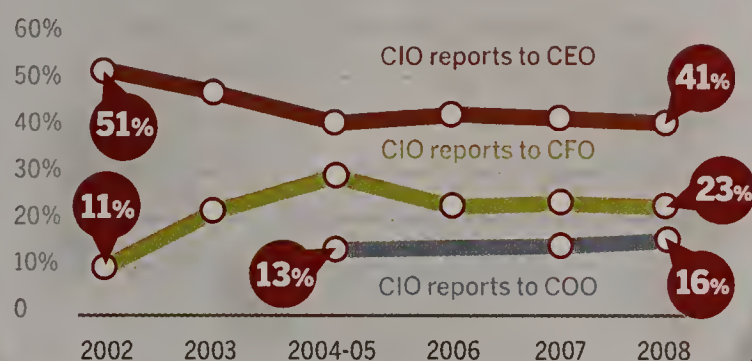
The CIO's **average tenure** has dropped by eight months. Last year, it was **five years, one month**. This year...

YOUR AVERAGE TENURE IN YOUR CURRENT POST

4 yrs., 5 mos.

Your Boss

While CIOs continue to report to the CEO more than to any other position, it's still only 41%—despite the fact that CEOs claim IT is of critical **strategic** importance.



NOTE: The remaining 20% of CIOs report to corporate CIOs and to other functional and operational leaders.

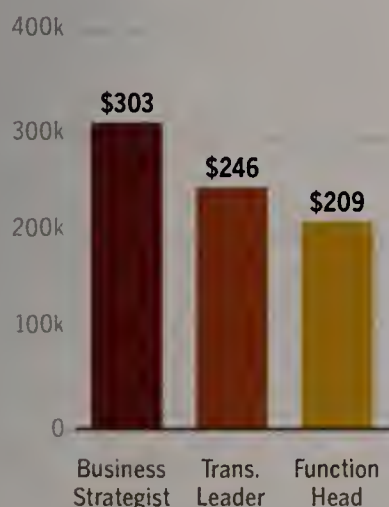
Money and Time, Time and Money

CIOs in education trade money for security, earning considerably less than CIOs in most other industries but staying on the job considerably longer.

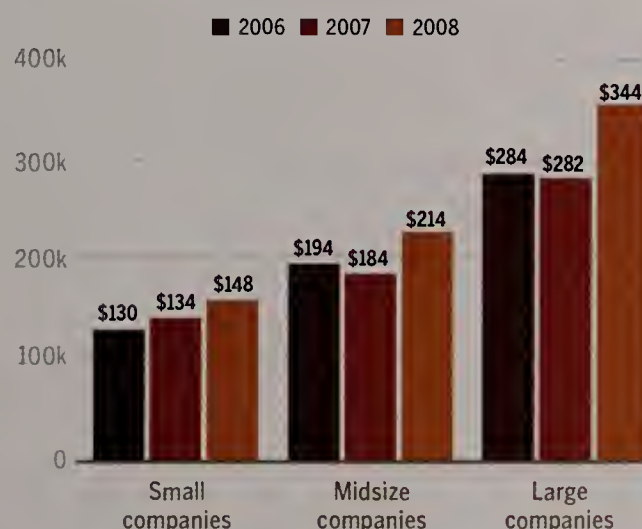
COMPENSATION AND TENURE BY INDUSTRY

Industry	Average Salary	Average Tenure
Finance/banking/accounting	\$273,900	4 yrs., 9 mos.
Manufacturing (noncomp.)	\$263,800	4 yrs., 9 mos.
Wholesale/retail	\$262,300	4 yrs., 8 mos.
Health care	\$260,000	4 yrs.
Education/nonprofit	\$151,300	5 yrs., 9 mos.
Government	\$139,500	4 yrs., 2 mos.

BUSINESS STRATEGISTS MAKE MORE



COMPENSATION TRENDING UP



NOTE: Average pay by revenue size (Large = \$1 billion or more; Midsize = \$101 million to \$999 million; Small = \$100 million or less) Numbers are in thousands (000)

What's In a Name?

A lot, especially when "chief" is in the title. Today, more heads of IT sport the **CIO** title than ever before, while the old-fashioned "director" has fallen out of favor.

	2004	2007	2008
CIO	49%	50%	60%
CTO	3%	6%	4%
VP/IT	13%	13%	11%
Director	29%	23%	18%
Other	6%	8%	6%

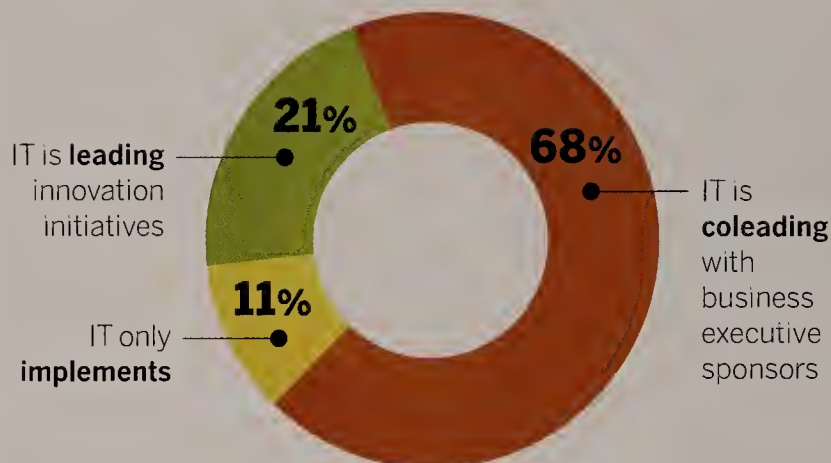
WHO's on the EXECUTIVE COMMITTEE?

82% of RETAIL CIOs; only **55%** of MANUFACTURING CIOs

Partners in Innovation

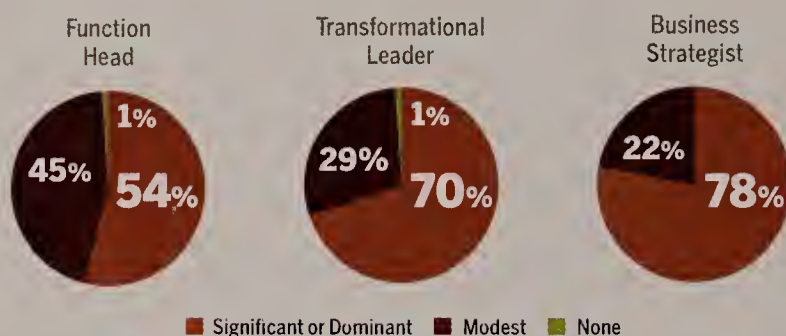
Innovation Is a Team Sport

It's not something you can do alone, but you sure don't want to be left out of the fun of creation.



Business Strategists *Live* Innovation

All CIOs know that innovation is important, but more than 78% of business strategists call it **central to their role** as opposed to only a little more than half of Function Heads.



Every budget dollar that doesn't go toward keeping the lights on can be invested in

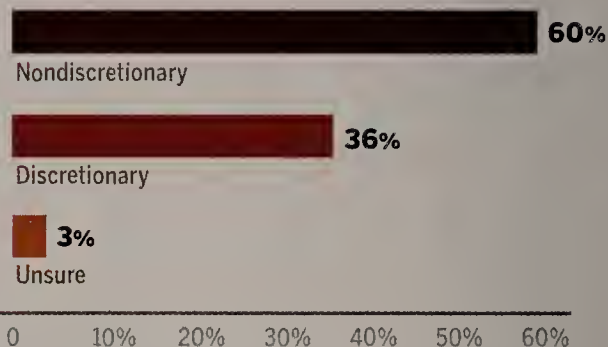
INNOVATION.

So how much of your budget is locked up and how much is

DISCRETIONARY?

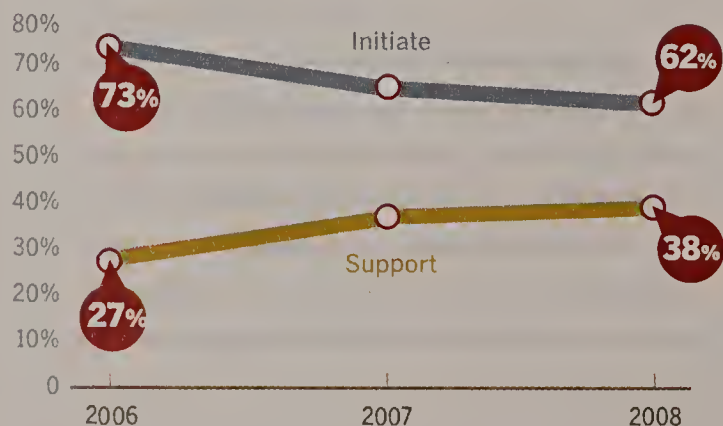
DISCRETIONARY vs. NONDISCRETIONARY SPENDING

36% of the average CIO's budget can be devoted to providing new capabilities. Do you think that's enough?

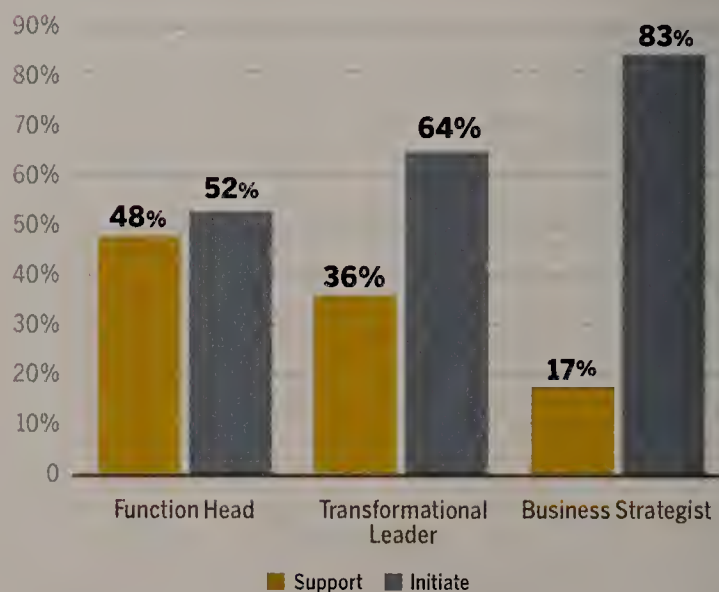


What Role Should a CIO Play?

It's been a long-standing debate: Should IT initiate business innovation projects or simply support them? Even though "support" is trending up, almost **2/3** of CIOs still believe IT should take the lead.



BUSINESS STRATEGIST CIOs BELIEVE I.T. SHOULD BE PROACTIVE. DO YOU?



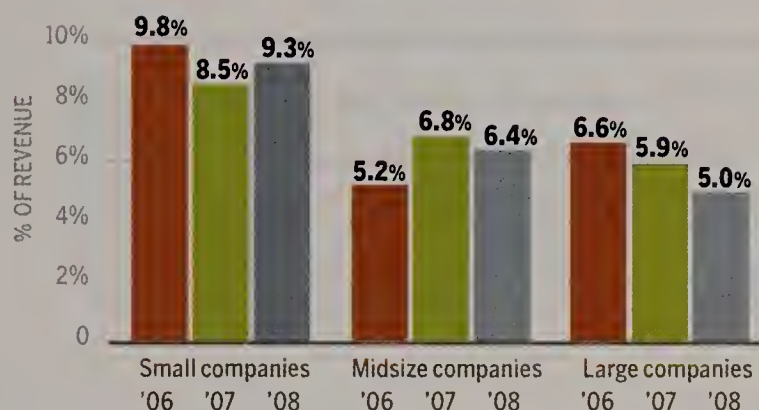
Your IT Department

AVERAGE I.T. SPENDING
AS A PERCENTAGE OF
REVENUE

6.7%

Healthcare CIOs have relatively small IT budgets but they spend a **larger percentage** of that budget (43%) on **discretionary projects** than all other industries, including financial services. **This allows them to drive innovation.**

I.T. SPENDING BY COMPANY SIZE



NOTE: Large = \$1 billion or more; Midsize = \$101 million to \$999 million; Small = \$100 million or less

Financial services companies are spending a lot more than other industries—and more than they did last year—while manufacturing companies are spending a whole lot less.

I.T. SPENDING BY INDUSTRY

	% OF REVENUE	
	2007	2008
Finance/banking/accounting	8.3%	10.5%
Government (state or local)	7.5%	7.8%
Education	5.9%	6.2%
Health care/medical/pharmaceutical/biotech	5.6%	5.0%
Retailer/wholesaler/distributor	4.4%	3.9%
Manufacturing and process industries (nontech)	5.0%	3.4%

Business Strategists Focus *Outward*

They spend more time with company executives and customers than do other types of CIOs. Function Head CIOs spend twice as much time with their IT team than with any other constituency.

HOW YOU ALLOCATE YOUR TIME

	Function Head	Transformational Leader	Business Strategist
Your company's executives	20%	23%	27%
IT staff or team	42%	39%	32%
Non-IT employees	18%	18%	17%
IT vendors/service providers	11%	11%	10%
External partners/customers	8%	10%	14%

NOTE: Respondents were asked to estimate the amount of time spent with each group.

BUSINESS PROCESSES, IMPROVED

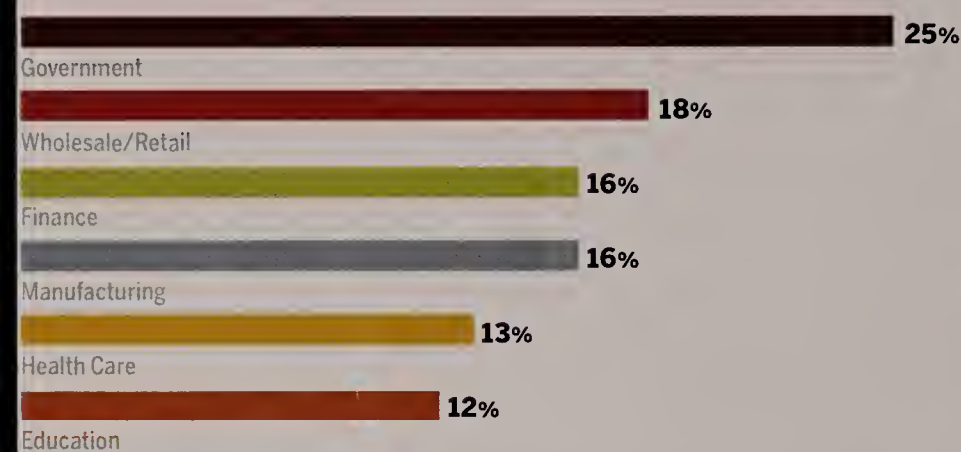
Ratings reflect what all CIOs are working on, but externally focused Strategists put Customer Service #1, Sales #3 and Marketing #4

Total Rating	BUSINESS PROCESS
1	Accounting and finance
2	Customer service/support
3	Human resources
4	Compliance
5	Asset management/maintenance
6	Sales
7	Supply chain/logistics
8	Order/invoice processing
9	Marketing
10	Inventory management
11	Risk management

Outsourcing: It's Not Going Away

Outsourcing has become a stable, predictable part of almost all enterprise sourcing strategies. Government outsources the most, education the least, but the total percentage of outsourced work has not changed significantly across all industries from this year to last.

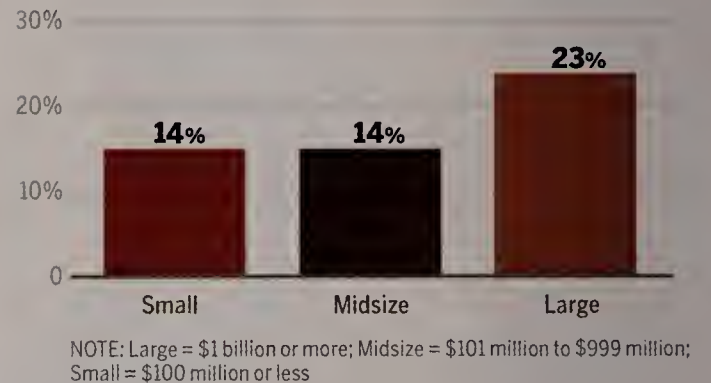
PERCENTAGE OF I.T. LABOR OUTSOURCED BY INDUSTRY



Size Matters

The larger the company, the greater the percentage of work it outsources

OUTSOURCING BY COMPANY SIZE



Whom Do You Support?

Finance gets most intimate with its users

I.T. STAFF-TO-USER RATIO



Different Strokes for Different CIOs

The activities listed below are characteristic of each type of CIO in the CIO Executive Council's "Future State CIO" model. Based on our survey respondents' choices of what activities capture their time and energy, we classified **37%** as Function Heads, **51%** as Transformational Leaders and only **12%** as Business Strategists.

Function Heads spend time...

- Managing IT crises
- Developing IT talent
- Improving IT operations
- Improving system performance
- Managing security
- Managing the budget

Transformational Leaders focus on...

- Redesigning business processes
- Aligning IT initiatives/strategy with business goals/strategy
- Cultivating the IT/business partnership
- Leading change efforts
- Implementing new systems and architecture
- Mapping IT strategy to overall enterprise strategy

Business Strategists spend their time...

- Developing/refining business strategy
- Understanding market trends
- Developing external customer insight
- Developing business innovations
- Identifying opportunities for competitive differentiation
- Reengineering or developing new sales and distribution channels

State of the CIO '08

For more, go to: www.cio.com/special/slideshows/state_of_the_cio_2008/

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MORE RESULTS ON PAGE 84

Your Agenda

Taking Care of the Business

Aligning IT and business goals and IT-enabled process improvement rank first and second, respectively, across companies of all sizes.

YOUR TOP MANAGEMENT PRIORITIES

Aligning IT and business goals	1
IT-enabled process improvement	2
Business continuity/risk management	3
Improving internal user satisfaction	4
Controlling IT costs	5
IT staff development	6
IT governance	7
Revenue-generating services/products	8
Measuring and communicating IT value	9
Improving project management discipline	10
Data privacy	11
Regulatory compliance	12
Scaling IT globally	13
Other	14

NOTE: Respondents ranked their top five priorities.

What's Up With Wireless?

Most of the CIO's technology priorities remained relatively stable from last year's survey. (CIOs are *always* integrating and enhancing systems and processes.) But wireless dropped from 5th to 12th place. Is this iPhone backlash?

YOUR TOP TECHNOLOGY PRIORITIES

Integrating/enhancing existing systems and processes	1
Business intelligence	2
Ensuring data security and integrity	3
New business services/products (i.e., Web services)	4
Collaboration/knowledge management	5
Enterprise architecture/service-oriented architecture	6
External customer service	7-tie
E-commerce	7-tie
Supply chain automation/visibility	8
Data center optimization	9
Identifying/incorporating promising new technologies	10
Content/document management	11
Mobile/wireless	12
Other	13

NOTE: Respondents ranked their top five priorities.

The rewards
will be there in 2008 for CIOs who develop
leadership competencies
that are more **business, market** and
customer-focused.

CIO RESEARCH

SURVEY METHODOLOGY

CIO's seventh annual "State of the CIO" survey was administered online from July 9 to July 31, 2007. Senior-level IT executives were selected from the CIO audience database and invited to take the survey. Findings shown are based on the responses of 558 heads of IT from a broad range of industries. Twenty-six percent of respondents were from companies with annual revenue of \$100 million or less; 39% were from companies with revenue between \$101 million and \$999.9 million; 32% had revenue of \$1 billion or more (3% declined to answer). The margin of error is +/- 4.1%. Percentages may not sum to 100 due to rounding.

-Carolyn Johnson, Research Manager

Looking Forward: IT's Impact

Asked what would have the greatest impact on the business, CIOs were clear: enabling business innovation through IT.

	2006	2007	2008
Enable business innovation	3	1	1
Improve customer satisfaction	2	3	2
Reduce business costs	1	2	3
Create competitive advantage	5	4	4
Grow existing revenue streams	7	7	5
Enable new revenue streams	8	6	6
Improve security/risk management	4	5	7
Enable global expansion	9	9	8
Supply chain automation/visibility	10	10	9
Enable regulatory compliance	6	8	10

NOTE: Respondents checked their top three goals.



Collaboration With A Single Objective (For Example, Dominating Your Competition).

Alternative thinking is acknowledging that IT is no longer merely a cost center, but the lifeblood of the business.

It's partnering with over 69,000 HP Services people who not only understand this fundamental shift in IT, but also had a hand in writing it.

It's a human face you can rely on to liberate your IT people—setting them free to drive innovation in the marketplace. (Viva la brains.)

It's demanding hard, cold business metrics and working with HP Services to reach them.

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How to Sharpen Your Commercial Instincts

To find moneymaking opportunities, the CIO of FirstGroup had to rethink risk, ROI, idea ownership and what the CIO really has to offer

Information technology is one of the only professions where you can reach the pinnacle of your career as a CIO of a major organization and still have significant weaknesses in critical leadership competencies. Because of these weaknesses, we don't represent a consistent brand to our customers. The CEO brand stands for strategy and execution, and it commands a degree of trust from day one. The CFO stands for financial excellence.

But what does the CIO brand stand for? One of the ways we become top performers as business strategists, transformation experts, effective managers of people and masters of our IT domain is to hone our commercial instincts. We should be good at finding moneymaking opportunities for our organizations.

Most of us (including me) become CIOs having had little experience with identifying and capitalizing on commercial opportunities. Since I was formerly a military officer, my distinctive strengths are in team leadership, and I took these strengths with me to IT-related roles where I had a strong passion. I didn't have a solid commercial orientation and experience in managing risk effectively. As a beginning IT manager, I had skills that corresponded precisely to the way respondents to this year's "State of the CIO" survey rated themselves

on their proficiency in 10 leadership competencies (read more at www.cio.com/cec/strategic_cio/).

But all 10 competencies are essential for a CIO who wants to transform the business by finding, developing and executing innovations that increase revenue opportunities. Innovating to increase revenue and improve productivity was among my key goals while I was at FirstGroup, the largest surface transportation firm in the U.K. and now in the U.S.

Here's an example: When FirstGroup changed its structure from one of multiple operating companies to a federal structure, IT identified the possibility of managing spare parts for bus fleets in a more coherent way. We asked why we needed to have multiple parts stores around the country, and why we purchased replacement parts for buses that were still under warranty (in essence, paying for the



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parts twice). We stood to save a lot of money if we improved productivity and compliance.

The technology component for this initiative was a single countrywide ERP platform based on SAP. From a commercial perspective, we thought of information within the system as currency that we put in the hands of key business decision makers. Today, the system is used to procure new goods and services. It has enabled executives to understand the company's spending in detail, leverage economies of scale and improve cash flow management.

Rethinking Risk

To achieve a better commercial orientation, I had to start by understanding more about risk. If you want to bring in more revenue or reduce the cost basis of operations, and if you want to be a profit center, you have to understand enterprise risk management. I see a lot of risk-averse behavior in IT leaders. This attitude can stifle creative thinking and the ability to gain advantage over your competition.

For example, we overhauled the IT infrastructure at FirstGroup. This effort was initially seen as risky, and many questioned whether it needed to be done at all. But the implementation of this global infrastructure model was a key component of the five-year IT strategic business plan. Commercially speaking, it was a foundation upon which to rationalize about 300 different and redundant business systems to a core set of applications based on a common architecture. Champion-

ing changes of such size and complexity means you must be prepared to educate your business on the risk of doing nothing. In this case, doing nothing would not only have perpetuated escalating development and maintenance

costs; the outdated infrastructure would have limited our ability to create new commercial applications.

I have also learned that many commercial innovations may not satisfy the internal criteria that we often associate with the business case for change. Some of the most innovative ideas would never get off the page if they were decided solely on financial criteria like payback period. We initiated a centralized program services office to manage how we did projects across the company. We knew we needed to demonstrate to the business that the disciplines of project management would enable the business to achieve better commercial results. But if we had to use normal business case metrics to justify this, it might never have gotten off the ground.

No one puts constraints around IT's capability as much as we do ourselves, by limiting ourselves based on our job descriptions. All the job description does is tell you to run the engine room.

This is not to say that such well-tested approaches are not necessary, but that you (and your company) should be open to the notion that some of the best commercial ideas may fall outside the criteria you use to assess business-as-usual activities.

The Importance of Marketing

I also realized that marketing skills are essential to a commercial orientation. I must be able to showcase a business opportunity and create momentum around it to appeal for resources. I market commercial ideas throughout the company (not just at the top) to build momentum, because if an idea takes off, I'll need engagement at all levels.

One way to get your message across is to use every available resource on your team to help. I achieve this by creating very simple "elevator scripts" that every IS staff member who may get an opportunity to market an idea can pass along. These are messages that people can identify with an idea. You need one or two paragraphs that you want not only the CEO to remember, but that even the desktop support engineer will be able to bring up when he interacts with a business partner. Consistency and simplicity in message will do the trick.

Another path to marketing success is to give your idea to someone else. I try to ensure that the executive who would be the beneficiary of a successful outcome is the one who owns an initiative as part of his strategy. You might be the kick-starter for an idea, but you may not be the best-placed executive to promote or deliver on it. For example, the spare parts management idea I cited above came from someone in IS who supports the business. The idea was quickly adopted by the operations and engineering groups and incorporated into their strategy.

Finally, let yourself participate in the commercial discussion. No one puts constraints around IT's capability as much as we do ourselves, by limiting ourselves based on our job descriptions. All the job description does is tell you to run the engine room. If you want to exercise business leadership, no one's going to stop you. When you're wearing your business leadership hat, you have as much weight as anyone else. **CIO**

Leadership on Video

CIOs from Northrop Grumman, Purdue University and Chevron discuss **LEADERSHIP COMPETENCIES** in the CIO Executive Council Outlook video series at www.cio.com/video/outlookseries. See Darin Brumby's "elevator script" at www.cio.com/article/160106.

CIO.com

Darin Brumby is former CIO of FirstGroup, based in Aberdeen, U.K., and a member of the CIO Executive Council. He recently joined Nationwide Building Society as director of business systems transformation. To comment on this story, go to www.cio.com/article/160106.





More than 500 of your peers in the CIO Executive Council are collaborating on issues essential to the IT community — and beyond.

Since the CIO Executive Council's inception in 2004, members have participated in hundreds of peer-to-peer calls and interactive group meetings — enabling them to connect to one another at any time, on any topic. Change management, software licensing practices, expanding the role of the CIO, applying the right Web 2.0 strategy, getting today's youth interested in IT — these are just some of the upcoming issues our members will tackle.

Join the discussion. To view more upcoming CIO Executive Council meetings or to recommend discussions most relevant to you and your enterprise, visit www.cioexecutivecouncil.com/community.

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The CIO Executive Council was created by readers of *CIO* magazine and leaders within the community of CIOs to leverage the individual and collective strengths of its members, to serve as unbiased and trusted advisors to each other and to advance the CIO profession and its role in driving shareholder results for their respective organizations. In just three short years the CIO Executive Council has grown to over 500 CIOs worldwide, representing executive leadership in organizations with approximately \$2.5 trillion (USD) in annual revenues.

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THE 10 CHARACTERISTICS OF THE Business Strategist CIO

BY RICHARD PASTORE

What distinguishes Business Strategist CIOs?

They...

1. REPORT TO **CEOs**

51% of Business Strategist CIOs report to CEOs but only **39%** of Function Heads and **42%** of Transformational CIOs do.

2. SIT AT THE **EXECUTIVE TABLE**

84% of Business Strategist CIOs sit on the executive committee but only **68%** of Function Heads and **70%** of Transformational CIOs do.

3. EARN **MORE**

Business Strategist CIOs earn nearly **\$100,000** more than Function Head CIOs, and more than **\$50,000** more than Transformational CIOs. The size of the company is not a factor.

4. FOCUS ON **CUSTOMERS** AND THE **BUSINESS**

They are more proficient at external customer focus, commercial orientation and market knowledge than other CIOs. (See the "Strategic CIO Impact Assessment" at http://quizzes.cio.com/impact_quiz/.)

5. SPEND MORE TIME WITH **OTHER EXECUTIVES**

Business Strategist CIOs on average spend **31%** more time with their fellow business executives than Function Heads do.

6. SPEND MORE TIME WITH **BUSINESS PARTNERS AND** **CUSTOMERS**

They spend **80%** more time on average with customers and partners than do Function Heads and 49% more time than do Transformational CIOs.

7. LEAD BUSINESS **INNOVATION**

Business Strategist CIOs lead company innovations more often than do their CIO counterparts, and feel that innovation is a dominant part of their role.

8. FOCUS ON **DRIVING REVENUE**

After staff development and process improvement, Business Strategists place revenue generation as their highest priority for 2008. Function Head and Transformational CIOs prioritize this 12th and 9th, respectively.

Business Strategists place revenue generating services and products at No. 2. Function Heads name IT governance; for Transformational CIOs, No. 2 is measuring and communicating IT value.

9. ENHANCE **BUSINESS** **PROCESSES** THAT TOUCH THE **CUSTOMER**

Business Strategist CIOs focus on customer service, sales and marketing, while CIOs in the other two groups are more focused on more internally oriented processes.

10. LEVERAGE I.T. FOR **COMPETITIVE** **ADVANTAGE**

Business Strategist CIOs say IT will have the greatest impact on creating competitive advantage, with enabling business innovation and enabling new revenue streams second and third.

Richard Pastore is managing director of content development for the CIO Executive Council. To take the CIO self-assessment quiz to find out where you land on the Business Strategist-Transformational-Function Head CIO spectrum, go to http://quizzes.cio.com/impact_quiz/.



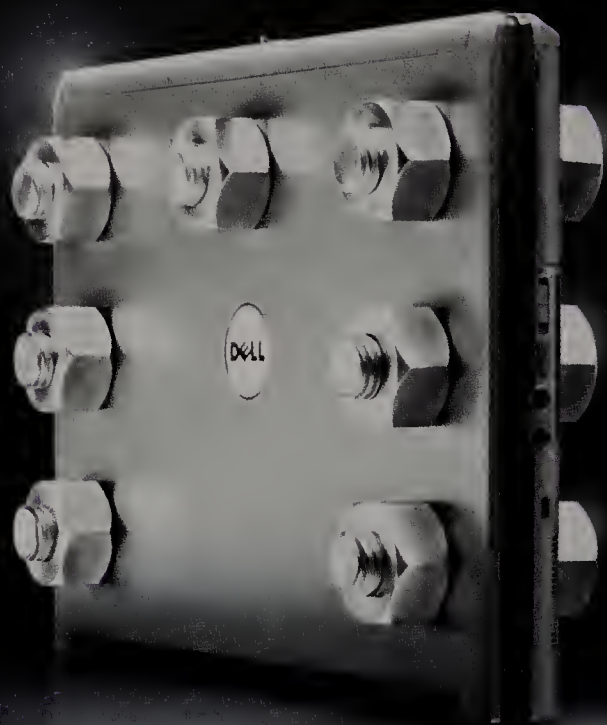
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